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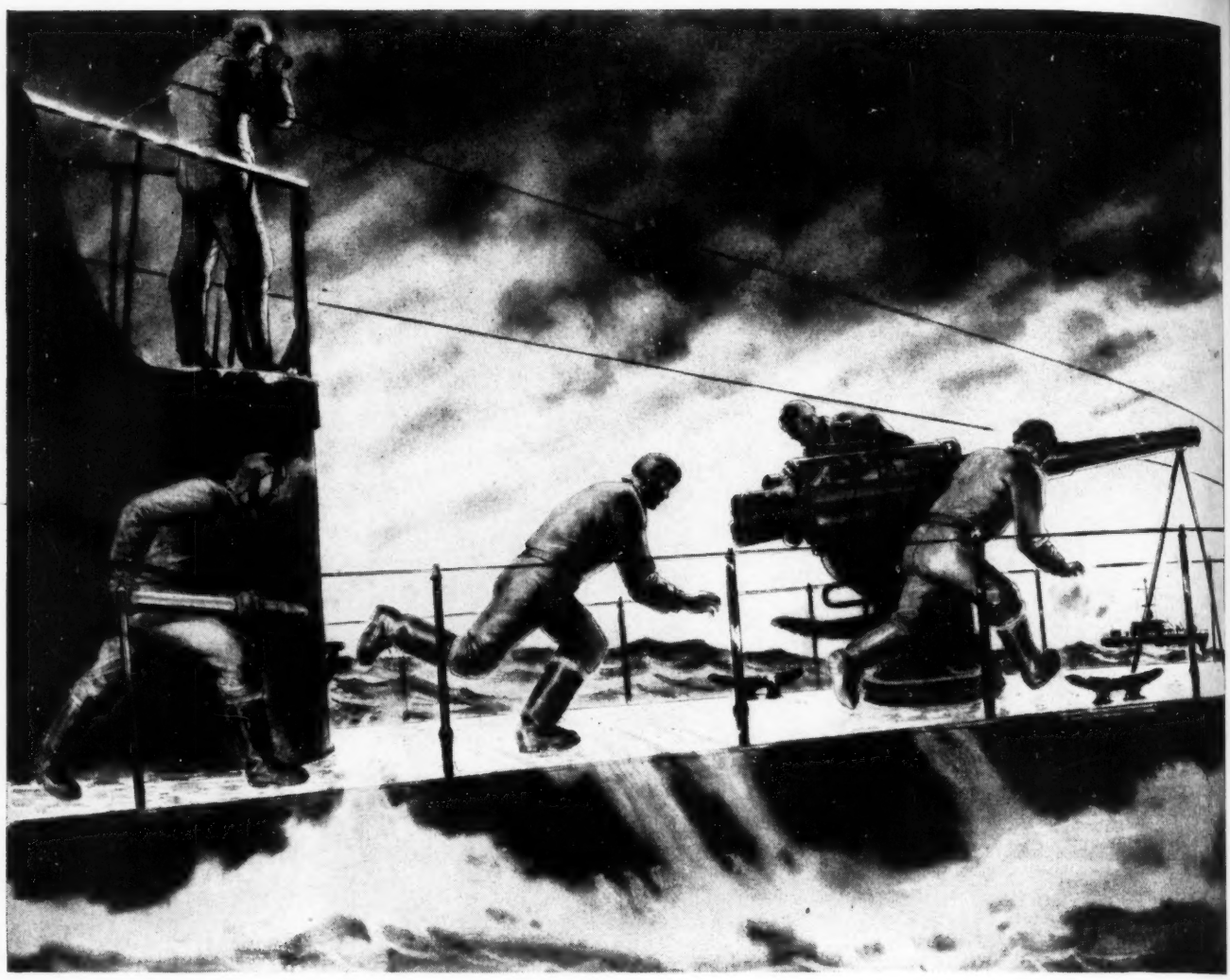
No. 8

"The Joy of Effort"
By
R. Tait McKenzie

AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION
A Department of the National Education Association



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For Youth's Future

By

JOHN EDGAR HOOVER

Director, Federal Bureau of Investigation

United States Department of Justice, Washington, D. C.

AS FUTURE generations read the history of this war they will marvel at the speed with which the United States transformed its industrial facilities from the construction of peacetime implements to the forging of a fighting machine surpassing anything which had gone before. They will glory in the victories of our fighting men on battle fronts throughout the world; they will look with pride upon the men of law enforcement charged with the duty of protecting the home front from espionage and sabotage; they will give thanks for the cause of democracy which was preserved for them as a sacred trust.

Let us hope that they also see recorded another triumph, one not so readily apparent, but equally as important—the battle against the astounding wartime increase of crime among our young people.

Many persons resting secure in a lethargy of personal security have failed to face the all-too-apparent facts. During the first year of war the problem of juvenile crime soared to a position of national importance requiring the immediate attention of parents, social organizations, schools, churches, and law enforcement organizations. Fifteen thousand young girls under the age of 21 were arrested by police departments in the United States, an increase in 1942 of 55.7 per cent over the previous year. These figures were compiled from the arrest records on fingerprint cards submitted daily to the Federal Bureau of Investigation by thousands of police departments throughout the United States.

Surprisingly enough these statistics also disclose that the largest age class of criminal arrests was not of mature adults but in the 18-year age bracket for men and the 21-year age group for girls. Young men and women under 21 accounted for fifteen per cent of all arrests for murder, thirty-four per cent of all arrests for robbery and larceny, and fifty per cent of all arests for burglary. The same trend continues for 1943, the second year of war, with many classifications of crime still in the ascendancy.

These figures indicate that many Americans have failed to adjust themselves to meet the demands made by a wartime economy. Industry was readily adjusted to meet the demands of war, but individual thought and action have been slow to make the change. Since our entrance into the hostilities, peacetime barriers to lawlessness have been lowered in many ways. Fathers, older brothers, and sisters have been called into the armed services and many mothers have found it necessary to work leaving the home an empty spot for the youngsters. Family life has been broken

(Continued on Page 440)

Physical Fitness and the W.A.C.

By

CAPT. DONNA I. NILES

Director, Well-Being Division
Women's Army Corps
Washington, D. C.

FOR the first time in the history of this country, thousands of women have been banded together, placed under military rule, and put to work in many different fields. This regimentation has brought to light numerous problems. One of the most important is the creation and maintenance of physical fitness.

The physical fitness program of the WAC has naturally changed since its inception in July, 1942. As the Corps has widened and expanded its activities, the demands upon the women have increased proportionately. The training program has changed to meet these demands.

The physical training program as expressed in *Field Manual—Physical Training, WAC* is the result of a year's experience in dealing with thousands of women under varying conditions. In some ways the physical training program in the WAC has the advantage over civilian programs, and in some ways it is at a great disadvantage. Factors such as discipline, the ability to establish standards and insist upon their being upheld, and the psychological advantage of the women having a definite reason for improving their physical condition—these are all powerful allies. Factors such as time, space, and equipment are far below civilian standards. Civilian physical educators coming into the WAC felt this lack very keenly in the beginning. The longer we serve in the WAC the more we feel blessed by this apparent handicap. It makes us concentrate on our one objective more wholeheartedly than would be possible if a more extensive program were possble. It settles automatically the question of whether this sport or that sport is better for developing fitness. With such huge numbers of women, it becomes imperative to take the quickest and most direct means to fitness—a planned, systematic, body-conditioning program. Sports are utilized for recreation and as accessory body builders.

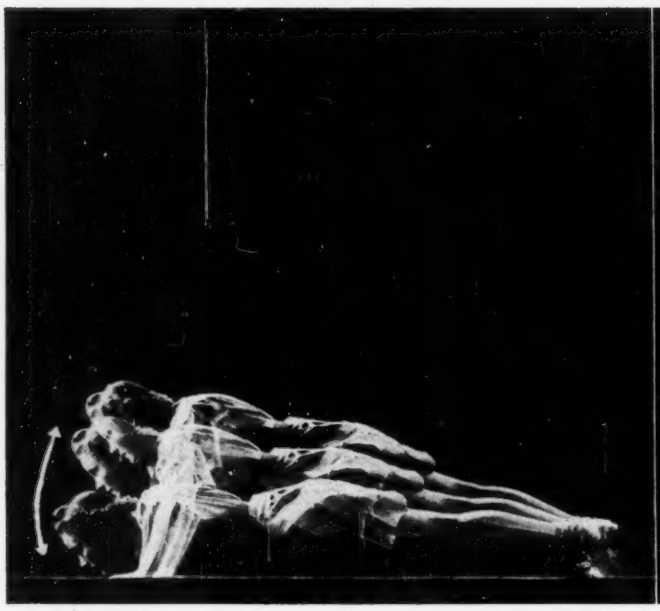
The program must consider several phases of life in the Army. It must carry the women from the moment of their entrance into the Corps to the moment they are discharged after the war. Fundamentally this includes three phases:

1. Basic training—the period of orientation and instruction in things military.

2. Specialist training—a continuation of training in things military but on a higher and more specialized plane than basic training.

3. Field training—the most important part of the training, because it is the longest phase. A woman may spend two and half months in basic and specialist training, and the duration of the war in the field. Therefore, the emphasis in basic and specialist training is upon making the women realize the benefits of fitness from their own point of view, teaching the women the meaning of fitness, how it is attained and

Full Dip.



Sit-up.

maintained, and going as far in the direction of actual attainment as possible. The field problem then becomes one of the continuation of this training to a high degree of fitness and maintaining it for the duration.

The WAC does not believe in the "spoon feeding" of exercise. We try to let the women in on the secrets of fitness so that they will feel an intelligent interest in their appearance and will cease to depend on someone else "exercising" them. We want the women to exercise themselves for reasons they themselves best know and understand.

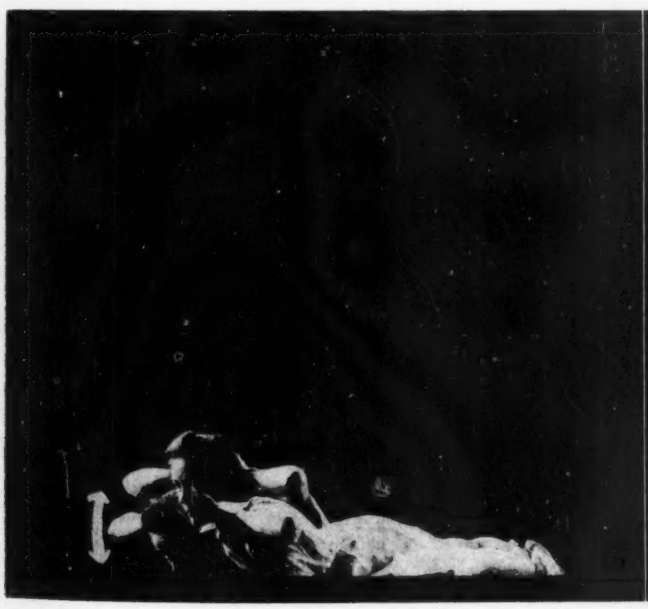
Therefore, the role of specialists in physical education in the WAC is, first, one of creating an appreciation of and a desire for planned exercise; and secondly, of training instructors and supervising the conduct of the program. It is comparatively easy to train a physical educator to become technically proficient but a harder one to make a verbal exponent who can visualize and talk fitness from another person's angle. Commercial enterprises have enlisted the aid of advertising men and women who can reach the public—unfortunately many times with fads and fancies not worthy of being expounded. We in physical education have the straight, honest, and scientific approach but more rarely an approach that is based on the average person's desires. The WAC believes in a program based upon mutual understanding of another person's objectives. Indeed, our experience with tens of thousands of women in the WAC forcibly brings out the point that only a program predicated upon a sympathetic and intimate understanding of the average woman's motives can have any chance of genuine and lasting success. We believe this is our big job—without it no program will succeed.

The WAC is in the process of developing a physical fitness orientation film. Its theme is simply that of expressing every woman's reason for engaging in planned exercise. The instructor must carry on the stimulation as necessary, but the first impact will be carefully calculated and planned from the woman's point of view.

EVERY officer and many non-commissioned officers are given preparation for teaching. We make no claims for producing physical educators as a result of this instructor's course, but we do produce women who know the program and, above all, believe in it. In the Army, health and physical fitness are the responsibility of the commanding officer. As a matter of pure logic, the woman who knows the program herself and does not have to lean on specialists is more apt to consider it important. One hundred per cent success with this thesis is impossible. Some individuals will always prefer to be scornful rather than exert themselves in physical exercise. Here, though, the more voluntary emphasis placed upon fitness is implemented by administrative regulations and requirements.

The vitamins of the WAC physical training program are the body-conditioning exercises. Sports and games are the dessert of the program. They assist in developing fitness. They fall down as a prime promoter of fitness for large groups of individuals. Excellent performers in a vigorous sport will receive dividends in fitness. However, the level of sport skill of the average woman of the ages 20-50 is very low. They do not know how to play most games well enough to get much exercise out of them. Instruction in sport skills is stressed after basic body conditioning. One of the prime aims of the WAC program is to give the woman a means of keeping in condition after the war as well as during it. Body-conditioning exercises will achieve this in the absence of any facilities. We try to prepare the women to take advantage of available facilities in her community after the war. If facilities do not radically increase, this means of maintaining fitness will not be possible for many women. We want no woman to lack the means of maintaining fitness whether she does or does not have sport facilities.

Wing Lift.



Running.

Lifting should be done by the leg muscles rather than the back muscles. Get the body under the object as much as possible and place it so that the weight is centered over the whole body.

The WAC believes in training women physically to meet any job that they might be assigned to. Further than that, we believe that every woman should be at her top physical condition, regardless of the job she is doing. In the WAC, a typist should be as fit as a truck driver, not only for her own satisfaction, but for the meeting of emergencies. These emergencies may range all the way from moving herself and her belongings from one spot to another to actually fighting for her life on the high seas. As soon as radically different standards are set for different occupations, the inference is that people do not need the factors of strength, stamina, coordination, and stability for everyday living. No job assigned any WAC is above the capacity of a woman in fit condition. We make no attempt to build Amazons. The aim is to defeat the idea so prevalent in American life that it is normal and proper for women to be flabby and dependent on synthetic devices for simulation of a fashionably trim appearance. War tolerates nothing but accomplishment. Women must be able to do a job, not merely look as though they can do a job. Administratively, in the Army, the specialized fitness for different jobs falls down because a woman may not know what her job will be until she is presented with the task in front of her. Then it is too late. The WAC aim is maximum fitness for every woman.

Softball is popular with the WACS.

Every adult person has had some experience with exercise in some form. Each has his own preconceived notions on the value of different activities. Many times these are based on false premises. We feel that it is reasonable to take advantage of this feeling of authority that a person develops through experience and make sure that worth-while results are the individual's experience. This is then supplemented by instilling basic, irrefutable facts by which a person can intelligently account for his experience. This does not mean that everyone must be subjected to a full course in kinesiology, anatomy, and physiology. We try to arrive at a few fundamentals of these subjects and make them stick. It is late to begin this with adults. The proper time more likely is in grade school. Knowledge of a few fundamental facts will go far toward making a person a "pro" for exercise.

This self-experiencing of the benefits of physical fitness might have a salutary effect on the profession itself. Many times the instructor is handicapped in presenting the benefits of exercise because of his or her appearance alone. Our choice of WAC staff members in physical education is based to a large degree on this factor of appearance.

PEOPLE have a tendency to believe anything of which they are a living example. A woman with

beautiful hair feels instinctively that all women could improve the appearance of their hair if they took care of it. They are likely to be voluble on the subject. The same phenomenon could be made to happen in relation to body appearance and fitness. It could be made fashionable to be fit. This will never be accomplished by a select group of physical educators "standing responsibility" for the fitness of other people. The nonprofessional's opinions and enthusiasms are essential. The person should preferably be one who has basic facts as well as feelings to pass on to others.

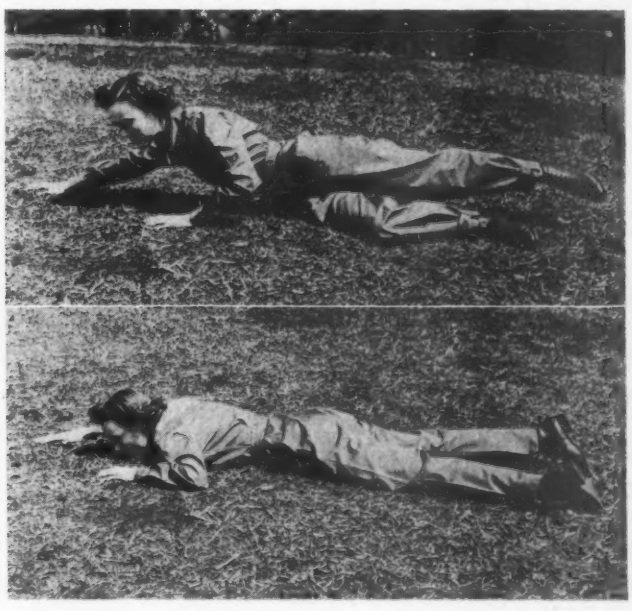
The body-conditioning program of the WAC is designed in such a way that the woman comes under its influence daily during her entire stay in the WAC. The time allotment varies according to the phase in which a woman happens to be, i. e., basic, specialist, or field training. During basic and specialist training the time allotment is forty minutes a day. When a woman reports for field work at a post, camp or station, this time allotment is cut down to fifteen minutes daily. This maintenance program is then supplemented heavily by recreational sports and games. In the matter of time this does not seem to be a very extended maintenance program. It is sufficient if the work is done with zest and a will. We make sure there is no inclination toward thinking "What shall I do today." This is usually fatal to an inclination to exercise. The exercises are set. A woman knows her record up to this point, plus her neighbor's. She knows her officers are interested in her ability. She wants to improve. The individual must have faith in what she is going to do and why she is doing it. She must possess a definite exercise goal.

We feel that there is great psychological advantage in exercising together, but being alone is no excuse for neglecting exercise. Someone taught the people of this country fairly satisfactorily to take a bath daily, to brush their teeth twice a day, etc. Perhaps by simplifying the process of exercising and giving meaning to it in terms of values each person holds in regard to pride and appearance, we would promote exercise the same way. With an appreciative increase in basic body fitness, some of the "spectatoritis" might be cured. If fifteen minutes a day are spent on the hair and face in preparation for facing the world, surely fifteen minutes to maintain the appearance of the body is not excessive and will pay as large dividends. In the WAC we have the advantage of being able to insist upon it. In all fairness and looking toward the future, an attempt is made to do these things without coercion. The WAC believes that each woman should possess strength, stamina, coordination, and stability. We believe that our program of planned exercise will aid in these areas: posture, improved muscle tone, increased resistance, more stability (fewer days of absence from duty), better elimination, improved stamina, relieved muscle tension, and better body coordination.

(Continued on Page 448)

A friendly game of checkers.

When falling, right foot should be forward with toes inward, so that individual lands on outside of right knee and thigh. Use hands to break rest of fall, keeping body relaxed.



Dental Fitness for High School Seniors

By the
COUNCIL ON DENTAL HEALTH
of the
American Dental Association, Chicago, Illinois

A MACHINE with missing or defective parts must have them restored or replaced before it can be said to be in condition to render the most efficient service possible. *Correction of defects* is therefore rightly placed first on the list of the six objectives of the High School Victory Corps Physical Fitness program, outlined in the new manual for the Corps published by the United States Office of Education.

One of the largest, although among the simplest, problems in the task of preparing high school seniors for the strenuous jobs that lie ahead of them is the correction of dental defects. A high school boy or girl may have well trained muscles and plenty of strength and agility, but cannot make the fullest use of these assets when under par physically because of defective teeth.

The lack of complete dental equipment detracts from one's ability to masticate properly and often leads to avoidance of foods which require considerable chewing—such foods as raw fruits and vegetables, which should be included in most people's daily diet. Even more serious than this reduction of normal function is the fact that decayed teeth, when they became infected, are likely to give rise to systemic illness that may be difficult to trace to its source. Illness of this type, arising from infection from abscessed teeth or from pyorrhea, is the sort of thing that slows down motor activity, lessens endurance, and creates a general feeling of debility.

Few people are immune to dental decay, and for reasons yet unknown, decay is frequently most rampant during the high school years. Unfortunately, no reliable method is known at present for the prevention of decay. Practically everyone, therefore, needs dental care at frequent and regular intervals. Boys and girls of high school and college age are not as a rule likely to suffer from pyorrhea, but scarcely one in a hundred escapes decayed teeth. The only dependable method known for saving teeth attacked by decay is the insertion of fillings—a job that can be done only by a dentist.

OUR present problem, then is to see that high school seniors obtain needed dental care before

(Continued on Page 439)

Unsightly space seriously affects the personal appearance.

Modern dentistry can change the teeth from a liability to an asset.

Fitness on the Industrial Front

By
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THE FUTURE of democratic living, even civilization, depends more upon what we do in our leisure time than during working hours. Proper utilization of leisure time has been an important consideration in the nation's history before. In the post-war world it will assume an even more important position. The movement toward a five-day week and a six-hour day was steadily progressing before we entered the war. *Recent Economic Changes in the United States,* a report by a distinguished committee headed by Herbert Hoover, and published in 1923, presented the conclusion that one of the most significant problems for future America would be the proper utilization of leisure time.

Recreation, the intelligent use of leisure, is being recognized as a factor in the production equation, essential to the final result which must be victory. America today is working as it has never worked before. Like machines running at top speed, men and women are applying themselves to war production tasks. But the human element, the effect of this drive on the physical and mental condition of workers, is being recognized by industrial leaders. They are sponsoring nation-wide, moral-building programs, urging workers to play, to play wholesomely in their leisure hours, which will make them more efficient workers mentally and physically when they return each day to their war production jobs.

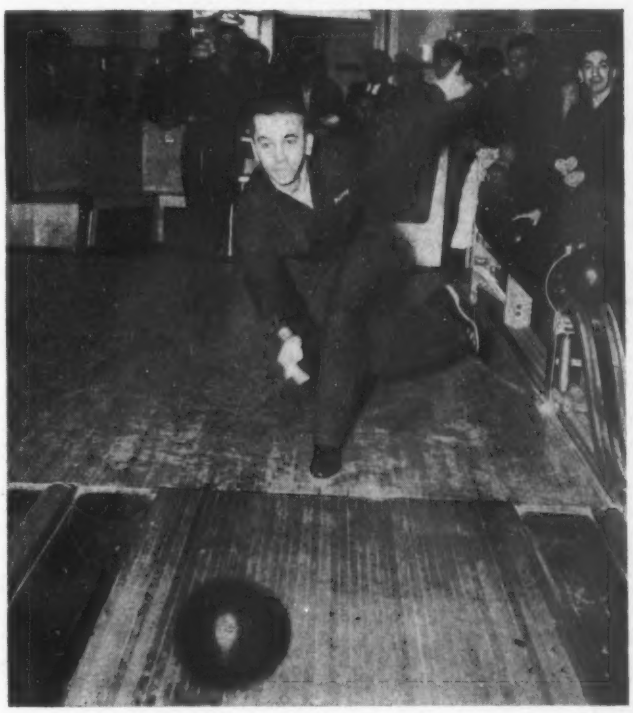
Speeded up war production has probably furnished more impetus to recreational planning than any other one factor. Industry is taking a leading role in the war-recreation effort. With the greatly increased use and crowding of public and community facilities, the influx of new workers, industry has recognized the problem as its own. "We have found that it's more important now than ever before to sponsor athletics. The only luxury now available is leisure time and it's up to us to give employees something to do with that time," was the comment of the personnel director of one large industrial firm which sponsors an industrial athletic program.

For the first time, perhaps, industry has felt free to consider work and play for their combined value in industrial relations without fear of repercussions or charges of patronage.

Keeping in mind the five "unfair labor practices" as set forth in the National Labor Relations Act for employer guidance, management sometimes has shied away from participation in an activity with employees, fearing investigation by the National Labor Relations Board. Management need never fear investigation where the program involves only recreation for their employees.

"In my conversations with employers in many large industries, their attitude toward industrial recreation has sometimes been similar to the attitude that prevailed toward industrial medicine before industries learned its value," said Dr. Morris Fishbein, editor of the *Journal of the American Medical Association* in speaking before the annual conference of the Industrial Recreation Association in New York recently. "The attitude of suspicion by the worker who feared that the physical examination was intended to deprive him of employment is similar to the suspicion of the worker toward industrial recreation," he continued, "who feels that it is some subtle plan on the part of the industry to regiment him and get more work for less money. I do not doubt that both industrial medicine and industrial recreation could be utilized as techniques for the control of large masses of men. I am equally convinced, however, that the proper development of industrial medicine and industrial recreation will improve health, both physical and mental, of the worker, increase output, decrease absenteeism, and altogether make better American citizens—men and women capable of exercising the initiative necessary for the individual in a functioning democracy."

Bowling is a favorite year-around activity of workers at the Curtiss Propeller Division of Curtiss-Wright Corporation in New Jersey.



"In one year enough time was lost by sickness to build a 40-million-dollar battleship every week." This was the startling fact relative to physical fitness of workers revealed by a survey by Dr. George Gallup of industry engaged in war emergency production. That American industry and the men who make it up must be made aware of the importance of the physical fitness of the individual in relation to the war effort cannot be denied.

Physical fitness, in its broadest sense, includes the ability of the organism to respond in a specific situation. It means that the heart, the lungs, and the blood stream are ready to do their part in allowing the individual to do the required job. This fitness is built through participation in vigorous recreational activities. It provides the brain with a muscle that is ready to respond. It provides the muscle with the ability to lift, to throw, to catch, to push, and to withdraw. The well-trained man breathes less often, his heart beats slower, his circulation carries away fatigue products more rapidly and his muscle is rebuilt more quickly.

It is generally accepted that rest means a change in activity. This rest may promote physical fitness by an employee engaging in recreational activities. A change from the routine of the assembly line to participation in a total body activity, such as is found in recreation, acts as a therapeutic agent associated with fitness.

THERE are many recreational activities which are concerned with physical fitness but which are more significant from the point of view of mental hygiene. Such sports as bowling, dancing, archery, bait and fly casting, badminton, tennis and golf, as ordinarily played, do little to improve the physical fitness of those who participate. Their recreational value leading toward benefit in mental hygiene cannot be doubted.

Meeting on the common field of recreational participation has been found a means of bridging the gap of misunderstanding and suspicion that sometimes exists between management and the worker. A national survey showed that employer-employee relations were improved by industrial recreation. The existing gap between individuals or groups of individuals within an industrial concern is augmented oftentimes by the very impersonal relationship that is maintained. Management tries to minimize labor costs; employees endeavor to acquire the highest wage possible. Each is suspicious of the other. The scientific approach of management, time and motion studies, flow charts—all are examples of the techniques which minimize the personal contact between the administrative officers and the employee and tend to judge individual employees by statistical standards alone.

It is human to want to be liked and to be noticed. It is as true of top management as it is of the man working for eight hours at a punch press. The response a person receives from his fellowmen determines the attitude he will assume toward the world in general. Working and playing together may bring about a mutual understanding of the other fellow, an understanding which includes an appreciation of the problems of

Night-shift workers at Bendix Aviation get their recreation at 7 a.m. in the form of a fast-moving basketball game after working hours.

Women employees of Champion Paper and Fibre Company in Ohio have formed a riding club. They enjoy the friendship of fellow workers while getting good outdoor exercise.

the opposite party.

The rubbing of shoulders and matching of skills of management and the worker will engender a feeling of mutual admiration and appreciation. Any worker enjoys a chance to beat the boss. A friendly linking of the forces of production, through industrial recreation will tend to reduce the frictions between employer and employee.

Recreation for management is as vital as that for the worker. The man behind the desk needs the relaxation and the rest of a change of activity as much as the man on the assembly line. By taking his recreation with the people who are responsible for producing or selling the goods, the advantageous effect on company morale is fortified as well.

The mental state of the worker is important in relation to accidents. People who like their work, their surroundings, the people they work with, will be less likely to have accidents than those who dislike their work. People who are bored with their work have more accidents than those who are interested.

There are a number of variable factors that make up the complete picture of inspired production. Proper lighting, working conditions, attitudes of management, rates of pay, home conditions of the workers and many other variables are a part of that picture. A comprehensive industrial recreation program should become one of the ingredients that makes up the compound of increased production.

Few leaders in business and industry have, to date, appreciated the fact that the individual who participates in a broad range of recreational activities acquires better general coordination in handling the body in motion. Although scientific evidence is not available to prove the fact that the well skilled person produces more on the production line, it will be generally agreed that dexterity of hand and eye, and foot and eye, are a natural result of training in recreational sports and games. General dexterity, trained and educated through recreational activities, is transferred into adroitness needed to run a lathe, a punch press, or a printing press. Hobby and sport activities can be excellent training for manipulative skills needed in industry. Comparable movements of the hand are necessary in numerous job operations in industry.

Good general ability to coordinate body movements is usually possessed by all workers who have a high rate of production. Industrial recreation activities have a place in training these general body coordinations. An example is judgment which is necessary for an individual to make from the time the ball leaves the pitcher's hands until the batter swings. Will the ball be high, low, inside, outside, slow, or fast? Such judgments of time and distance set the stage for proper coordination in order that the ball may be hit properly.

Split-second judgments must be made similarly by the individual inserting a sheet in a printing press, placing a piece of material in a punch press, or other industrial operations. The efficiency of an individual is judged by his ability to properly determine what to do and to coordinate his muscles so that he does it ef-

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Meeting the Teacher Shortage in Wartime Physical Education

A COMMITTEE REPORT*

The Problem

TEACHER shortage is a serious and perplexing problem for school administrators. In spite of this difficulty the physical fitness program is receiving increased attention. School administrators are showing initiative in adjusting their programs to meet the wartime needs of pupils.

A variety of methods is being used to meet the shortage in trained teachers of physical education. It is the purpose of this statement to present these methods for consideration. Some administrators may say that they have at one time or another tried similar plans but without success. In such instances it is urged that the suggested methods be studied and be given another trial. It is a patriotic duty and responsibility to see that high school boys and girls become physically fit.

The Meaning of Physical Fitness.—A person is said to be physically fit when he is free from handicapping defects and disease, follows good health practices, and has the knowledge, skills, strength, endurance, and will to do effectively the maximum tasks of the day. In a broad sense physical fitness might be said to be analogous to a superior health status. It is fitness for living in the home, in the school, on the farm, in the factory, or at the battle front.

The limitations of fitness are determined by inheritance, but within these limitations daily living practices develop and otherwise influence fitness. Suitable work, adequate nutrition, the correction of defects, exercise, rest, relaxation, freedom from worry and tensions, the use of preventive and therapeutic medical services, and the avoidance of excesses, including alcohol and tobacco, are all important in developing and maintaining fitness. Participating regularly in a good program of physical education has been demonstrated to be one of the important elements in the school program that contributes to the development and maintenance of physical fitness.

The Need for Physical Fitness.—There is an immediate need for high school students to become physically fit. They are making and must continue to make a major contribution in the armed forces and in wartime services.

About 25 per cent of the boys of high school age examined for service in the armed forces have been rejected as physically unfit. Army and Navy officers who have had the responsibility of training inductees, constantly state that young men without physical defects are often lacking in the necessary strength, endurance, stamina, agility, and skills required for effective military service. Consequently, their military training is retarded.

Most of the girls of high school age who are employed in war work by the end of 1943 will be in jobs which demand strength, endurance, and skill. War industry is increasingly feeling the impact of lack of physical fitness among girls and women. The high school is challenged to meet this need for physical fitness. The importance that the War Department attaches to school programs of physical education in the development of a desirable state of physical fitness is stated in the following letter.

War Department
Washington

June 16, 1943.

Dear Dr. Studebaker:

I have your letter asking whether the War Department recommends that military drill take the place of physical education in the curriculum of schools and colleges. I assume your question to apply only to the period of the present war and not to periods of peace.

The amount of military drill which can be given in schools and colleges can also be given after induction into the Army, in a relatively short period of time, and under the most productive circumstances. A good physical condition, however, cannot be developed in so short a space of time, and the physical condition of a soldier is of prime importance to the War Department.

The War Department does not want to appear to advise upon the make-up of a curriculum, nor to go beyond outlining some of the elements which the Army believes would be advantageous in its recruits. Of these, a good physical condition is extremely important and a knowledge of basic military drill relatively unimportant.

The War Department therefore does not recommend that military drill take the place of physical education in the schools and colleges during this war period.

The War Department has no objection to the publication of this statement, provided it is quoted in its entirety.

Sincerely yours,
HENRY L. STIMSON,
Secretary of War.

Steps to a Wartime Program of Physical Education. The majority of school administrators and adult citizens are agreed that the provision of an adequate wartime program of physical fitness for all pupils is one of the important and immediate responsibilities of schools. Physical education is essential to physical fitness. An adequate program of physical education

* Members of the committee are listed at the end of the article.

activities, suitable facilities, and competent teachers are necessary to meet the needs of students. A wartime program of physical education has been prepared by a committee representing the secondary schools of the country, the Army, Navy, U. S. Public Health Service, Committee on Physical Fitness of the Federal Security Agency, and the U. S. Office of Education. This program has the endorsement and support of all these agencies. It has been printed in a bulletin under the title, *Physical Fitness Through Physical Education for the Victory Corps.*[1]

The program described in this bulletin can be carried out with the minimum of facilities and equipment. With the necessary adaptations it has been used successfully during the past year in some of the largest city high schools and also in small rural schools operating under difficult conditions. In many schools much has been accomplished by improvising facilities and equipment. Rulings made during the past several months by the OPA and WPB have made possible the manufacture and sale of certain equipment and supplies that are needed in carrying out the wartime program of physical education.

Problems of personnel, time, and facilities should not be excuses for failure to establish a physical education program. Throughout the country excellent programs have been established and maintained under adverse conditions. The very extremity of difficulty has made some administrators eager to equal the war spirit of our fighting forces. In situations where students and patrons are apathetic or opposed to wartime physical education, the schools should secure their understanding and support.

Accepting this essential responsibility, each school administrator should take the following immediate steps:

1. Provide adequate time in the schedule.
2. Provide the best available facilities.
3. Secure, train, and supervise the best teaching personnel available.
4. Use every other source or device for aiding personnel in developing the physical education program.

Scope of Program.—Every effort should be made to retain or to develop a physical education program that meets the needs of pupils conducted under professionally trained instructors. Frequently by thorough investigation of all the possibilities more can be done along this line than is at first apparent. Anything less than such a program should be considered a temporary expedient to be remedied as soon as possible.

The minimum program to be carried on in every secondary school is outlined in the manual, *Physical Fitness Through Physical Education for the Victory Corps.* Every school can carry on at least the basic suggestions in this publication. Wherever and whenever conditions permit, the program should be enriched. Copies of this manual should be available in each school.

[1] This bulletin may be purchased from the Superintendent of Documents, Washington, D. C., for 25 cents a copy.

Meeting the Teacher Shortage

Many trained men and women teachers of physical education have left the teaching profession and are now serving in the armed forces or in industry. This has made it necessary for school administrators to recruit new teachers of physical education. The more common practices in this regard are:

1. Retired teachers have returned to service; sometimes on a part-time basis. It is recognized that such teachers may need to have some of the physical education activities demonstrated by the students.
2. Teachers who have limited training and experience in physical education and who do not meet present certification requirements have been issued temporary teaching permits.
3. Teachers of other subjects have been assigned to teaching physical education.
4. Women teachers of physical education have been assigned to teach or assist in teaching classes of boys. The use of students in such situations to demonstrate the activities has proved helpful.
5. Itinerant teachers have been used. Schedules have been devised which permit teachers of physical education to work in more than one school during the week. Such teachers, especially if some attention is given to the use of student leaders and assistance from other teachers, can initiate and supervise a program of physical education.

These teachers can be made more effective through carefully planned programs of in-service training, and through a sound educational policy in the use of student leaders. Suggestions for such programs are given below.

In-Service Training of Teachers

When the program of physical education is to be carried on by a teacher with limited preparation in physical education, it is essential that in-service training be provided. Course content in which the teacher should be trained, procedures for carrying out the training, and ways of financing the training are suggested in the following sections:

SUGGESTIONS FOR COURSE CONTENT: Teachers should receive training in the materials and methods indicated in the units that are described below. They should be given a broad understanding of the basic skills involved in the several activities suggested, rules of games and sports, methods of teaching them, and safety procedures. It is desirable but not essential for them to be skilled performers themselves, provided intelligent use is made of skilled students as demonstrators. A brief statement of the ten essential units of instruction follows:

1. *The selection of pupils for participation.*—The selection and classification of pupils for participation in the activities are based on: (1) their physical condition; and (2) their level of maturity. It is recommended that the physical condition of the pupils be evaluated by the observation of all pupils by their teachers and a more complete inspection of the pupils

who seem to deviate seriously from the normal. The techniques of carrying on the observation and inspection are described in Chapter III on "Selection of Pupils for Training" in the manual, *Physical Fitness Through Physical Education for the Victory Corps.*

2. *Methods of organizing wartime physical education programs.*—Teachers should understand that successful organizational techniques are based on sound principles of leadership. For example, the teacher should know his duties; get along well with people; demonstrate the activity or select a suitable demonstrator; encourage class participation in making decisions; organize the class so that opportunities for participation are used to the maximum; and use methods of instruction which tend to prevent accidents.

3. *The factors that contribute to physical fitness.*—This unit should help the teacher to understand how such factors as exercise, nutrition, prevention of disease, correction of defects, and problems of heating, lighting, ventilation, sanitation, and housekeeping contribute to total fitness.

4. *Athletic sports.*—Teachers should be given a broad understanding of the fundamentals and rules of vigorous athletic sports and methods of teaching them.

5. *Combative activities for boys.*—Teachers of boys should be given an understanding of the fundamentals of combative activities, such as hand to hand, boxing, and wrestling. They should be discouraged from promoting judo and other extremely hazardous or unsportsmanlike activities.

6. *Rhythmic activities.*—An effort should be made to provide a background in rhythmic activities. This is particularly important for teachers of girls.

7. *Games and relays.*—Games and relays provide a maximum amount of vigorous activity for large numbers in the minimum period of time.

8. *Gymnastics.*—Gymnastics make a particularly valuable contribution to muscular strength and to some skills of special use in military service.

9. *Aquatics.*—Skill in water activities is frequently essential for survival in all branches of the armed service and in civilian life.

10. *Standards and tests.*—Teachers should be familiar with techniques for evaluating progress in physical education.

PROCEDURES FOR PROVIDING IN-SERVICE TRAINING: There are many procedures for providing in-service training. Some of these are:

Consultant Services.—Supervision is on-the-job training of teachers in service. The learning situation in which the teacher learns from guided experiences is highly desirable. In many localities, trained supervisors are not provided and the problem of training inexperienced teachers, therefore, is compelling.

Some school systems have trained supervisors who do not now reach all of the schools. In such systems, this supervisory service should be extended through the use of assistants. For the many school systems now without trained supervisory services, a plan should be inaugurated for providing emergency supervisory services for the physical education program.

Such a plan, to be effective, preferably should be on a state-wide basis. It should have the flexibility necessary to practical use in local communities. Its object should be to make maximum use of trained and experienced teachers in helping the inexperienced teachers in the conduct of the emergency wartime physical education program.

An effective emergency plan includes:

1. The basic responsibility for the plan should be assigned by the chief state school officer to the state supervisor of health and physical education. In states which lack such a supervisor, a person should be temporarily appointed as acting state supervisor of physical education.

2. As many professionally trained area consultants as deemed necessary should be appointed to serve under the state supervisor. In some states an area consultant may function in a county and in other states the geographical areas for consultant service may be of different sizes.

3. Area consultants should ascertain the need and desire for supervision of physical education programs in schools within their areas.

4. Area consultants, after consultation with the school administrators concerned, should invite competent, experienced teachers to volunteer for supervisory services.

5. Area consultants should make available to schools in need of supervision the services of competent volunteers insofar as this is practicable.

6. The area consultant should report periodically to the state supervisor.

The above plan may be adapted to use on a local or county basis. It is deemed advisable that volunteers receive appropriate recognition for their services, and that arrangements for their expenses be made by the area supervisor with the schools served unless other means are available.

Institutes.—Institutes are among the most helpful procedures for increasing the competence of teachers. These may be organized by the state department of public instruction on a state-wide basis, by county superintendents on a county basis, or by the local administrator on a community basis. The facilities and personnel of state colleges and universities might be used for these institutes. Inasmuch as there are many activities with which teachers must be familiar, it is suggested that approximately one week be devoted to the institute. If this is not practical, the administrator may wish to organize three institutes each of two days duration. These should be spaced in such a way as to afford the teacher the greatest help. It may be desirable to conduct one early in September, another early in November, and the final one early in March. Students should be provided at all institutes for the demonstration of activities.

College and University Courses.—Colleges and universities should help by offering special courses for

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An Objective Test for Riding

By

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RIDING, termed individual and long branded as highly competitive, is finally coming into favor in preparatory schools and colleges. Riding instruction has been included in the curricula by many schools who have seen the advertising value of such offerings. That riding has grown and prospered must be credited to the fact that there are other worth-while features of this great sport.

The natural outgrowth of group enthusiasm is the desire to participate in that activity with others of comparable skill. Thus, inter-school and inter-collegiate riding meets are the answer. The "fly in the ointment" has been the problem of converting the judging of such participation away from the strictly competitive basis to a more objective analysis of the riders.

Several factors enter in; namely, the spirit and fun are gone when all competition is removed; the superior riders may lose initiative with repeated winnings when meets are judged on the old standard of first, second, third, etc., and the less talented riders will feel that they are beaten before they start.

Scoring sheets for the individual riders seem to be the answer to a knotty problem. To a person accustomed to the thrills of horseshow competition, score sheets may strike a dull note. But let this explanation make its own disciples.

It was for a riding meet between a team from Monticello College at Godfrey, Illinois, and Mac Murray College at Jacksonville, Illinois, that Miss Dorothy Potter, instructor at Monticello, first drafted a plan for the judging of riders. This plan worked well enough but it was re-considered and modified a year later by Miss Potter, Mrs. Charles Crabtree of Mac Murray, and Mrs. Austin Daily, instructor of riding at Lindenwood College, St. Charles, Mo. The original scoring plan was found to be broken down into too much detail, causing delay and great hardship in judging. For instance, in mounting, separate points had been awarded for—"left hand, right hand, left stirrup, reins," etc., whereas points are now given for reins (control) and ease and coordination.

An outline of the score plan follows:

Riding Team Competition

..... vs. .....

Name..... School..... Score.....
Individual Score Maximum 40

Mounting (3 points)
- Reins (1½)
- Ease and coordination (1½)

Dismounting (3 points) Same as for mounting

Walk (5 points)
- Hands (1)
- Circle (1)
- Reverse (1)
- Form (2)

Trot (14 points):

Collected trot (11 points)
- Change diagonals (2)
- Figure eight (2)
- Circle (1)
- Reverse (1)
- Elbows (1)
- Hands (1)
- Legs (1)
- Heels (1)
- Rhythm (1)

Extended trot (3 points)
- Seat (1)
- Hands (1)
- Control (1)

Canter (11 points):

Collected canter (8 points)
- Right lead (1)
- Left lead (1)
- Figure eight (2)
- Seat (2)
- Hands (2)

Extended canter (3 points)
- Seat (1)
- Hands (1)
- Control (1)

General Horsemanship (4 points)

The teams are composed of ten riders (eight of whom participate in singles) two pairs, two threes, and one team of four. Each rider enters three classes. The group events have the following score sheets:

..... vs. .....

Total 15 points.

Walk (5 points)
- Keeping together (2½)
- Seat and Hands (2½)

Trot (5 points)
- Keeping together (2½)
- Seat and Hands (2½)

Canter (5 points)
- Right Lead (1)
- Left Lead (1)
- Keeping together (1½)
- Seat and Hands (1½)

One of the finest things about such a judging system is that it is a fair means of rating all types of riders at the same time. For instance, the Mac Murray students ride strict show-ring style: Monticello teaches a modified show seat with the military mounting and dismounting; while Lindenwood riders use the show seat

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This article was submitted by the National Section on Women's Athletics.

The Editorial Page

Why Recreation?

WHAT is recreation? Why should it appear to be in conflict with physical education in the minds of some persons? Why is it so closely associated with physical education in the minds of others. In the latter case, is this association too close? What is the contribution of recreation to fitness—total fitness or the physical aspects of fitness? These are questions which seem to be bothering some persons in regard to the whole subject of recreation.

Like the word, "play," the word, "recreation," has been difficult to pin down. This is largely because play and recreation activities are viewed through one's own pair of colored glasses. Thus, whether an act is or is not a recreational activity depends on one's attitude towards it. A play or a recreational act is one which carries its own drive—you simply do it because you want to. The moment pressure is put on and one acts against his will, the play or recreation concept vanishes. Thus, *your* recreation may not be *my* recreation.

While recreation is the term we use for the adult play concept, strictly speaking, the play idea may enter into man's work, with the result that men like Edison have said, "I have never worked a day in my life."

Recreation has been associated with play because both imply freedom. Hence, both imply choice. In other words, the recreation pattern must appeal to the individual and the appeal is largely the following pattern: *challenge*—something significant to be done; *hope*—the feeling of confidence that it can be mastered; and *approval*—approval might be either individual or social, but is usually the latter.

The reason why play and recreational activities have been so closely allied with physical education is that so many of the child's play activities and the adult's recreational activities are those which are thought of as physical education. They involve running, jumping, dodging, climbing, the ring and tag games for children, and ball games, golf, tennis, and the like for older people. These activities all involve an "it" which either flees or catches but always is symbolic of danger. In play or recreation we always flirt with danger but not to too great an extent. These activities have a simple, even primitive pattern from the standpoint of the child and from the standpoint of the race. You see the "it" so often in the form of an opponent. Hence, the activities on the play-ground, in community centers, and in camping have been largely physical education activities—thus, the close relationship with our profession.

With the maturation of the nervous system, other challenges become apparent—manipulation of tools, manual training, music, science, social science, modes of expression, written or vocal. With this maturity, the physical education pattern becomes more complex with the use of sticks, bats, rackets, and clubs. As the child grows older, physical education activities must move over and make room for other recreational acts.

Recreation must also be viewed in the light of total fitness. Any act in which one can lose himself promotes an "all-thereness," an integration of the organism; hence, it contributes to the physical aspects of fitness. This might be referred to as the psychological contribution of recreation. From this standpoint, any phase of recreation—woodcarving, stamp collecting, nature exploration, a game of bridge—has a contribution. Other types of recreation such as a vigorous, physical education game may contribute the same integration plus the more specific, physiological values of body-power building. Thus, in community centers and with our armed forces, any activities which have diversional qualities are valuable; but an activity which has diversional plus body, power-building qualities is even better.

Recreation, itself, to fulfill its greatest mission, must be creative although appreciation of the performance of others has value. Man must feel his significance and this can be done only when he is a producer, a creator. During the past, much of this has come through man's work. In leisure primitive man added beauty to utility. These creators were known as workmen and this bolstered up a timid ego.

I would give the following definition of recreation: As man's work becomes mechanized and routinized to the point where it ceases to satisfy his longing to create, recreation is the name we give to an activity which offers him an outlet for mastery.

Recreation activities must, therefore, be placed on a scale of values from zero to infinity—all probably good, some better than others; still others could be ranked as "high" on such a scale, and hence, would be classified as the best.

The armed forces must use recreation purely for diversity, or for the achievement of integration for those who are under strain, sick, or recuperating, and as an antidote to the monotony of military life. They can use it also for body-power building if proper activities are selected. Recreation, therefore, must be thought of from the standpoint of a wide range of offerings.

This striving can be seen in many men—from Leonardo da Vinci to Winslow Homer—but we must also recognize the faltering steps toward this goal taken by the small child who brings home his first bit of drawing to an appreciative mother.

High on the scale of exploration may be Ponce de Leon, Ericson, or Stanley but low on the scale is the constant effort of a child to see behind every curtain, to reach for every strange object, to tunnel in the sand,

or to explore a dark cave.

In the field of music Mendelssohn, Schubert, Toscanini, or Sibelius may seem to have arrived at the height of success but the small child who gets an emotional release from his first musical effort is on the way.

One man and then another asked, "Why?" when he saw an apple drop from a tree, a great chandelier moving back and forth with rhythmic motion, a teakettle lid going up and down, and a finger enlarged as he looked through a piece of broken glass. But the boy who grinds a lens and makes a telescope from the muffler of a car, builds a radio, or experiments with the law of the lever is in the same field of science. We may be over-awed by a powerful mountain climber, a skier, a juggler, or an athlete with tremendous prowess; but we must recognize these beginnings in the little child in his first tag-and-it game, or with his first base hit.

Some men have recognized more clearly the wants and longings of man. It may have been a Buddha or a Mohammed, a Ghandi or a Kagawa, or it may have been a Messiah; but the small child who gets his first thrill of satisfaction from serving his group has embarked on the same trail.

Some will look upon these activities merely from the standpoint of offering diversion—an antidote to worry, fear, strain; at the same time others will think of these activities as offering a spiritual outlet for the creative urge which lies largely dormant in all of us; still others will add physical fitness as an outcome.—By *Jay B. Nash,* New York University, Past-President, A.A.H. P.E.R.

Health and Physical Education

THE natural emphasis on physical fitness and dynamic health as a result of the war emergency has revealed shocking general conditions with respect to the population as a whole. The record of illness in industry and commerce and of general physical condition as indicated by Selective Service experience is of extreme significance to the medical and dental professions, to public health specialists, to teacher-training agencies, and to the teaching profession as a whole.

The evidence is clear that, despite the relatively large sums spent on recreation, competitive athletics, and body conditioning, the educational and terminal results have been far from good. Further analysis also indicates that the physical and recreative activities must be considered as a superstructure of which the foundation is good housing, adequate and timely childhood medical care, and good food. It is also increasingly evident that health education, nutrition, and body conditioning are going to play a far more important part in the postwar public school curriculum than they have played in the past.

One of the anachronisms of prewar school health and exercise programs is that, while the ideals of strength and dynamic health were gushed from platform and training rostrum, the fundamental aspects of the program and even mass participation were evaded in the interests of revenue-producing, championship-emphasis programs.

Continued observation over a period of years has led to the conclusion that the real fault lay not with the teachers but with the training agencies. Specialized physical training schools under private auspices have been in existence for several generations but public colleges of physical education were not organized until after 1920. The first produced good technicians but the latter, unfortunately, too often have been pointed toward developing future athletes for dear old Alma Mater and the greater glory of the "old man" coach rather than a real college of physical education.

The time is ripe for a new start in health and physical education. The importance of this curricular division both to the individual and to the nation is too vast to permit vested professional and commercial interests to dominate the field. Teacher-training agencies should assume decisive and clear-cut leadership in this field. The urgent need is for a different type of health and physical specialist. Rigid selection should be based on all-round ability instead of mere muscular skill.

In terms of university organization, the training program might be organized in cooperation with other colleges and schools. General education should be pointed to provide understanding of and competence in democratic philosophy and practice. Essential training in the basic sciences of anatomy, biology, bacteriology, physiology, and nutrition requires cooperation with schools of dentistry, medicine, and science. Technical, physical, and play skills need to be carefully correlated with other aspects of basic training. General and specific teaching methods and understanding of the total education process may be developed in cooperation with departments or schools of education.

The end product of this training should be a competent specialist who understands the total educational program, the importance and relation of health and body growth in the development of physical fitness and dynamic health, and the relative value of competitive group play. This specialist would represent so high a degree of competence that he would no longer need be apologetic. He would carry sufficient professional prestige to stand against exploitative, publicity-conscious school administrators whose educational values are completely extrinsic.

In our estimation the training agency that grasps the total concept of health and physical education in the postwar years and cuts through the current cant and hypocrisy of most physical and athletic programs is going to assume an enviable leadership in the public school of tomorrow.—By *Arthur B. Moehlman, Editor.* Reprinted from *The Nation's Schools,* August, 1943.

Parallel Rhythms

By

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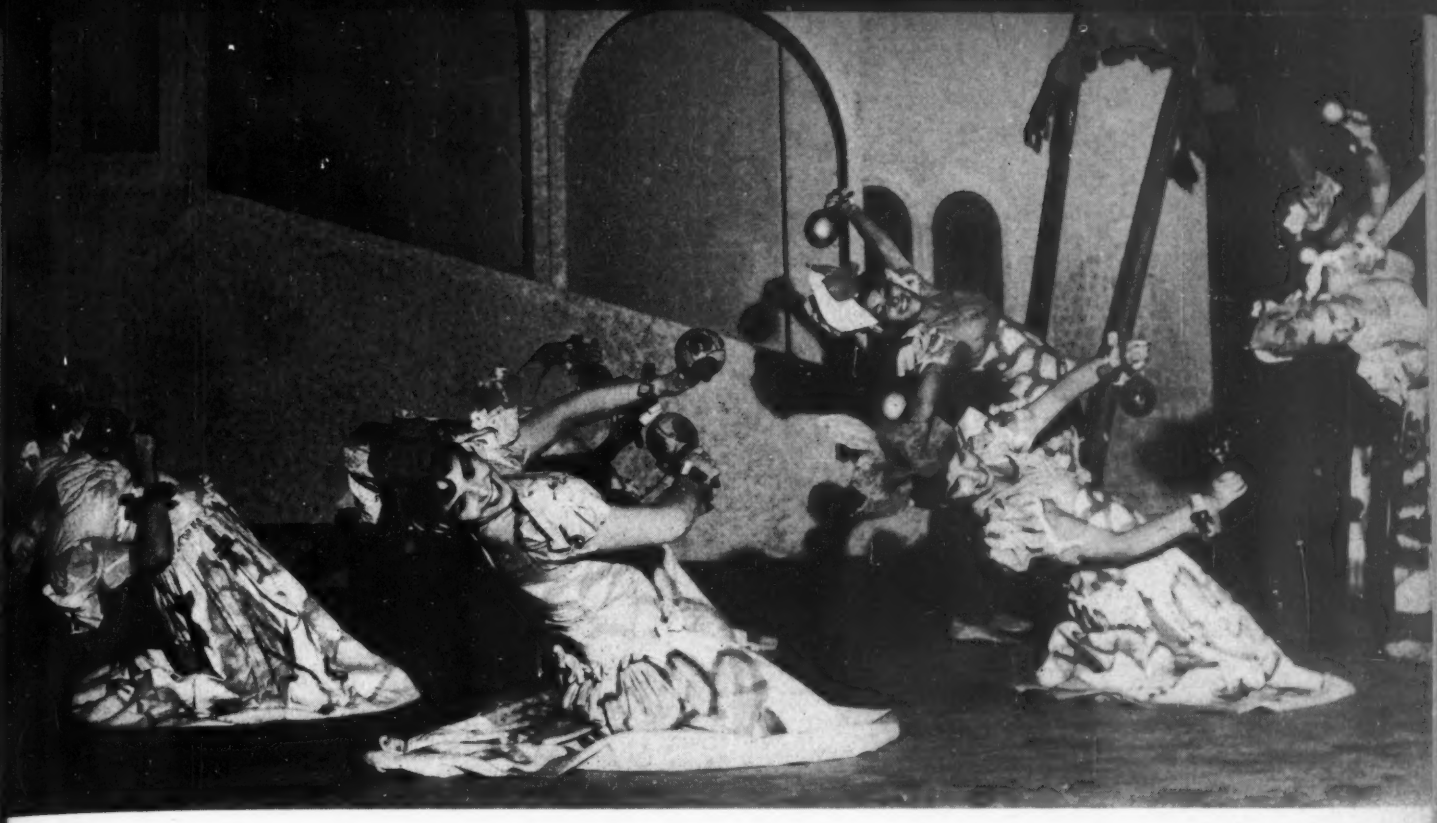
A PRIMARY and most obvious reason for the correlation between the music department and the rhythmic work in the physical education department is that both of the arts embrace therapeutic values. Can one deny the healing quality of great music as well as of rhythmic movement of the body? What of the recurrent rhythmic martial pulse which impels men forward, which quickens the heartbeat and coordinates the mind and muscular activities of the human being into one dynamic instrument? It might be well to mention in this respect how music has been introduced in the war factories for this express purpose. Through the realization of this affinity between the two arts there has been instigated a closer coordination between the two departments.

One of the great orders into which musical expression may be distributed is the rhythmic part which represents action of the nature of dance movements. In respect to the creation of rhythmic studies in dance movement it is necessary to know the metrical division of notes, and their syncopation and rhythmic structure. While this is the special province of the music department, the need of this knowledge on the part of the dancer only emphasizes the fact that there should be this close correlation between the two. This elementary knowledge plus the employment of percussion instruments constitutes the necessary equipment. As an example, it was our desire to achieve the flavor of the Polynesian dance with no attempt at authenticity. We took a basic 4/4 rhythm with accent on the second beat, upon which the dancers and members of the orchestra elaborated. We varied the tone color by introduction of cymbals, woodblocks, and flute. To all of this was added the theatrical effect of staging and lights. It should be borne in mind that a great demand is usually placed upon the time and resources of the orchestra, and the dance department must coordinate and must accommodate their rehearsals to the convenience of the musicians.

This experimental presentation of rhythm and music brings to life a great many fundamental facts in both of the arts, which can be absorbed to better advantage in this manner than under a more conventional presentation. It is a vital way of awakening interest in the arts of dance and music among those who do not specialize in the subjects. Its cultural value is inestimable.

In enumerating the types of accompaniments for dance movement, the effectiveness and value of the human voice may be suggested. Especially for Easter

Original tango, social dancing style. This will develop poise and balance.



Original rumba in modern dance style. Physical benefits resulting from this type of dancing are good posture, strong abdominal muscles, good feet.

and Christmas programs we found this approach highly dramatic and emotional. The human voice being the greatest of all instruments because it is a living thing, produces a sublime, spiritual effect which is unique as an accompaniment. An interesting effect may be produced by bringing to life, through movement, the characteristic attitudes of medieval subjects found in Gothic stained glass windows, using the singing of religious carols as accompaniment.

WE come now to the most obvious background for dancing, that of working with the conventional orchestral accompaniment. The range of orchestral compositions suitable for dancing is infinite. The intelligent choice of this material depends largely upon the innate good taste of the dance and music directors. It is always wise for the two to have a consultation in order to avoid the pitfalls of making a hackneyed choice of subject matter. Certain classic compositions remain fresh and of artistic value and can be used without hesitation. The Strauss waltzes are an example in mind, as well as the compositions of George Gershwin.

Our high school presented a program which illustrates how the departments of music and physical education may combine their efforts. The production was called "La Fiesta." The music used, except for one original number, is easily obtainable, including "Siboney," "El Choclo," and well-known South American melodies. The photographs accompanying this article were taken by the students of the photographic department of the school. They illustrate the original tango and rumba. This particular idiom is very much in vogue at present, due to the awakening interests in the cultural life of the two Americas. It has been our experience that the modern young people take readily to this form of expression, both in music and dance.

A dance concert or music production is but one of the many ways in which the dance and music departments can cooperate. Another excellent opportunity offers itself in folk dance festivals. The literature of folk dancing is one of the most comprehensive of all art forms and offers endless opportunities for acquiring a knowledge of the social and cultural lives of the world's peoples. The field is inexhaustible, particularly since new vistas in the folklore of South America have been opened to us recently, coming to our attention through the stimulation of interest in these countries. Whereas the European field in folk art has been fully exploited by specialists in both music and dance, the South American theatre has been up to now grossly neglected. It is exciting to contemplate in this field the opportunities awaiting the research worker. Little if anything is known of the beautiful festivals of music and dance of the Incas of Peru or of the Mayas of Yucatan. From the musician's standpoint the colorful and picturesque instruments such as the Huehuetl and Teponaztli (Aztec drums) and the Chririmiya (one of the little Andean flutes) offer not only an exciting adventure in tone color, but enhance the production on the stage by their appearance. This provides an opportunity for the musicians to be an integral part of the stage picture. These primitive instruments which cannot be readily purchased in our country, may be improvised. Some of the drums are made from hollowed logs and the flutes are primitive little affairs, with as few as two notes. Add to this material the wealth of

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Physical Performance Levels for High School Girls

Report of the Research Committee National Section on Women's Athletics American Association for Health, Physical Education, and Recreation

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Introduction

THE high school girl is an important member of the democratic society. The level at which she functions determines in part the success or failure of the democracy of which she is a member. If democracy is to be preserved, the high school girl, as well as the high school boy, must learn to control her mind, her emotions, and her body in order that she may function as an individual at her optimum level. It is the responsibility of those directing the education of the high school girl to provide her with opportunities to learn such control, to motivate her to accept such opportunities, and to enable her to measure her progress toward optimum functioning.

Not the least part of this responsibility is the training of her body to respond easily to the demands placed upon it. If the high school girl is to do her fair share of the work which must be done to preserve the democratic way of life, she will need muscular control and coordination, speed and agility of movement, and strength to carry her body and the implements she may use. The attainment of these requirements for adequate physical performance should not be left to chance. It should be planned for and provided for in the school curriculum in the same manner as provision is made for mental training. The attainment of these ends is one function of the program of physical education.

The committee wishes to express its sincere thanks to the Bureau of Cooperative Research of the University of Indiana for financial assistance with the statistical work necessary in computing these standards. The committee is also indebted to Miss Dorothy La Salle of the United States Office of Education for her advice, criticism, and cooperation at all times; to the many high school teachers who volunteered to administer the tests to their classes; to the thousands of high school girls who provided the data on which the standards are based; and to the members of the Epsilon Chapter of Delta Psi Kappa, University of Southern California, for additional statistical work.

To further the attainment of these ends, the United States Office of Education, in cooperation with the several branches of the military services, prepared for the high schools a manual, "Physical Fitness through Physical Education," and presented it in December, 1942. At that time it was recognized that no national standards of physical performance were available for high school girls. It was further recognized that such standards would be useful in coordinating programs of physical education for girls throughout the forty-eight states and in providing a measuring stick by which the results of such programs might be evaluated. The Office of Education through Miss Dorothy La Salle, Specialist in Physical Education, requested that the Research Committee of the National Section on Women's Athletics of the American Association for Health, Physical Education, and Recreation undertake the problem of providing standards of physical performance for the girls in the secondary schools. The tentative performance levels here presented were prepared in response to that request.

Choice of Tests

It is difficult, if not impossible, to measure adequately all aspects of physical performance. It is necessary, therefore, to choose a limited number of events closely related to certain major aspects of such performance. The first group of tests chosen includes a jump (the standing broad jump), a throw (the basketball throw for distance), and a run (the modified potato race which is based not only on speed of movement but ability to control and change the direction of the body while moving at high speed). It is believed that these three tests provide a reasonably good measure of coordination of body movements in ac-

complishing some useful purpose. These three events are also related to the racial activities of running, jumping, and throwing which are an integral part of the physical education program.

The second group of tests chosen includes three measures of strength of specific muscle groups as related to the ability to move the weight of the body. "Sit-ups," now a popular part of the conditioning program of all military services, are included as a measure of the strength of the abdominal muscles, and, to a lesser extent, of the hip flexors. The modified "pull-up" or "chinning" and the modified "push-up" are measures of the strength of the musculature of the arms and the shoulder girdle.

The third group of tests includes the ten-second squat thrust and the thirty-second squat thrust. The ten-second squat thrust, frequently referred to as the Burpee Test, is a measure of agility, or the ability to quickly change the direction of motion of parts of the body in relation to the body as a whole. The ability to continue this somewhat strenuous activity at a reasonable rate of speed for thirty seconds is considered to be a rough measure of endurance. It is recognized that this is not necessarily a measure of the type of endurance required to continue working at a moderate rate of speed for an extended period of time; however, it is a measure of the willingness and ability of the subject to continue exerting herself in a demanding situation and to that extent may be considered to give an approximate measure of ability to endure.

These tests require no elaborate equipment. They are simple to administer. A large number of girls may be tested at one time with the help of student assistants. The time required to administer the tests is reasonably short so that the testing need not interfere seriously with the instructional program. The tests are interesting to high school-age girls and provide an opportunity for self-evaluation in a variety of types of physical performance.

Determination of Performance Levels

In the spring of 1943 the physical education teachers of 87 high schools volunteered to administer the proposed tests to the girls in their classes. Tests were administered to 20,021 high school girls in 16 states, representing all parts of the country. Because the semester was so nearly over in many schools, it was not possible for all schools to administer all the tests, but approximately 15,000 scores were received for each of the eight tests included in the total battery.

The mean and standard deviation of the scores were computed for each test for each of the 88 schools.* The variability was great, suggesting that many factors may have entered into the determination of the scores in various schools. In some schools the girls had enjoyed the benefits of a physical education program for five days a week from the first grade through the senior year in high school. In other schools the program in the elementary schools had been slight or nonexistent while the high school program consisted of one or two days of instruction each week. In some schools the tests had been well motivated and the girls had been urged to give their best performance while in other schools motivation had been inadequate. It was possible that in some schools the girls had attained a higher level of performance as a result of a complex of factors while in other schools a lower level had been accepted as satisfactory. It was also evident in some instances that the instructions for giving the tests had been misunderstood and the tests had not been properly performed. Bearing these factors in mind, it seemed evident that an average of the scores produced under such divergent circumstances would have little practical or statistical significance.

The first step in preparing the tentative standards, then, was to scrutinize carefully the mean and standard deviation for each test in each school. Certain statistical tests for the rejection of doubtful data were rigorously applied, and every mean score which appeared doubtful for any reason was eliminated from further consideration. The school means which survived these tests were then tabulated and an approximately normal type of distribution was obtained for each test, although the range of these mean scores was still large.

To compute a "national average" based on this wide range of scores did not seem defensible to the committee. Performance levels based on such a "national average" would be far too low for many of the schools which had already achieved and surpassed such an average performance. Instead it seemed desirable to prepare levels of performance which could or should be reached as a result of adequate motivation in a well planned and well taught program of physical education. Consequently, the tentative scale of performance levels was based on the scores made by only the schools with superior records.

For each test the twenty-five schools with the highest mean scores were selected. This represented approximately the upper one-third of each distribution of school means remaining after all doubtful cases had been rejected. For each test the twenty-five schools chosen represented large and small school systems, rural and urban schools, and schools from practically all of the major geographic divisions of the country. Standards based on such a representative sampling should be possible of attainment in all schools if adequate instruction and motivation are provided.

The scores for each test from the twenty-five selected schools were thrown together in one master distribution and the master mean and standard deviation computed. The performance levels were then set up using the three-standard deviation T-score table, which is familiar to many physical educators as the

* In analyzing these data the question arose as to the possible effect of age, height, and weight on the scores made on the tests. Six schools, comprising 2,937 cases, were selected for preliminary analysis. For each school the data for each test were plotted against age, height, and weight separately. Means, medians, and ranges for each age, height, and weight grouping were carefully studied. No consistent trends related to any of these three factors were found for any of the six schools. It was, therefore, considered defensible to prepare only one set of standards for all high school girls without reference to the factors of age, height, and weight.

basis of scoring used in the California achievement scales prepared by Frederick W. Cozens and his collaborators. In these tables the mean score is given a value of 50; the score which represents three standard deviations above the mean is given a value of 100, and the score representing three standard deviations below the mean is given a value of 0. The tables are presented at the end of this paper, and represent tentative performance levels in the eight events for high school girls.

Interpretation of the Performance Levels

1. *Do the tables presented represent the average performance of all high school girls in the United States?* No. They represent the *range* of performance one may expect to find among high school girls who have had adequate or superior instruction, practice, and motivation in the skills of physical education.

A rough approximation of the extent to which these levels are at present approximated by the mythical "average" high school girl was obtained by taking a random sample of 500 girls from the entire 20,021 girls who took the tests last May. The percentage distribution of scale-scores was as follows:

Scale Scores	Standing Broad Jump	Basketball Throw	Potato Race	Pull-ups	Push-ups	Sit-ups	10-sec. Squat Thrust	30-sec. Squat Thrust	Average Scale-score
90-99	.....	.....	.....	2.2	1.0	.9	.....	.6	.....
80-89	1.0	.....	.....	1.6	1.6	1.0	1.0	2.4	.....
70-79	4.0	2.4	1.6	1.6	3.6	1.0	.8	2.4	.6
60-69	12.4	8.8	1.0	3.4	3.2	4.4	3.8	5.0	1.0
50-50	16.4	14.8	16.2	18.2	12.4	10.0	10.8	19.2	8.6
40-49	29.0	28.0	11.0	22.0	27.0	31.6	12.4	26.6	34.4
30-39	20.6	25.8	24.0	39.6	32.2	28.0	36.4	24.4	44.2
20-29	12.6	14.6	19.0	9.0	18.4	10.0	22.2	8.8	11.0
10-19	3.4	3.6	11.9	.....	.....	.....	5.2	7.2	.2
0- 9	.6	2.0	15.4	2.4	.6	3.2	7.4	3.4	.....

2. *With adequate instruction, practice, and motivation should every girl in high school expect to make an average score of at least* 50? No. For the girls on whose performances these tables are based, a score of 50 or better was achieved by approximately one-half of the group for any given test; a score of 67 or better was made by approximately one-sixth of the group; and a score of 83 or better was made by only about two girls out of each one hundred. It should be emphasized that even in these selected schools not all girls were superior performers. Approximately one-sixth of the girls made scores as low as 33, while for each test approximately two girls out of each 100 made scores as low as 17. Such a distribution of scores is to be expected since individuals in any group differ markedly in their ability in physical performance even though all have had instruction, practice, and motivation.

3. *How should the performance levels be used by the teacher?* The tests should be administered at the beginning of the semester. If the scale score average for the school is less than 50 in certain events, additional emphasis should be placed on those activities in the *regular physical education program* which relate to the type of performance in which the test scores are low. For example, if scores for the sit-ups are low, additional emphasis should be placed on those activities which help develop abdominal strength. It is *not* suggested that "sit-ups" as such should be made a major part of the physical education program, although they may be used as *one* of many general exercises which help develop abdominal strength. Similarly, if scores in the standing broad jump are low, it is *not* suggested that the girls spend most of their time practicing the broad jump. Rather it is suggested that more emphasis be placed on activities of which running and jumping are an integral part. In other words, a low school average in any given test does not indicate that the test *as such* should be practiced extensively and to the exclusion of all other activities; it should indicate only that in the general program greater emphasis should be placed on activities which serve to develop the particular ability or quality of which the test is a partial measure.

The tests should be administered again at the middle or end of the semester. Improvement in the *average* scale scores for each event should give some indication of the extent to which the program has been effective in improving each type of performance.

4. *How should the performance levels be interpreted by the girls as individuals?* After the first testing, each girl should know her average scale score, indicating her general performance level. She should also find her scale score for each test so that she may know wherein her performance is good and wherein it is poor. She should evaluate her performance in relation to that of the whole group, recognizing that her performance is superior, average, or inferior; but no censure or blame should be attached to a low performance if the girl has honestly tried to do her best. Each girl should be encouraged to start at the level at which she finds herself and attempt to improve her performance by moving up the scale 5 points or 8 points or 10 points. Each girl should be led to a recognition of her own physical possibilities *and limitations,* and should strive to improve within the limits set by those possibilities and limitations. At the time of the second testing, each girl should measure her own success in terms only of the number of score points she has improved, rather than in terms of her actual score.

5. *Do the tests provide a measure of physical fitness?* The tests provide a measure of the ability of the girl to use her body effectively in a variety of situations. This is one aspect of the complex of qualities and abilities which, for want of a better term, is called "fitness." The girl who can control her body, who has muscular strength to move her body easily, and who has learned how to expend her energy economically, is better fitted to do whatever job she may have to do. The extent to which she improves in these abilities is, therefore, one measure of the extent to which she has improved her fitness for present and future physical work.

The tests provide no direct measure of physiologic functioning of the circulatory, respiratory, digestive, excretory, and endocrine systems, all of which obvious-

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Fitness And How We May Obtain It

By

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FITNESS spells survival. Only total fitness is enough. This requires:

1. Freedom from disease and handicapping defects.
2. Enough of strength, speed, agility, and endurance to do easily and successfully the routine duties and maximum tasks that the day may bring.
3. Skill and willingness to perform useful work.
4. Freedom from worry or undue tension and the ability to shift promptly between complete absorption and utter relaxation as the requirements and opportunities of the moment may demand.
5. A personal philosophy that explains or evaluates in some satisfying way, the world as it is perceived.
6. A feeling of being, with others, a part of an important venture and at once important to that venture.

The attainment of total fitness—fitness for ourselves and especially for those who look to us for guidance will tax our resources as health educators, as physical educators, as leaders of recreation, and finally as teachers and friends of human beings.

As Health Educators

We find that we cannot dodge responsibility for the sad record of rejection by selective service. Right now 90 per cent of the thirteen-year-olds in our classes need dental attention. Among 18-25-year-olds this figure is 72 per cent. Unless about 23 per cent of the youngsters in our classes are wearing glasses it is probable that some are suffering eyestrain. About 28 per cent have bad tonsils, 18 per cent suffer nutritive disorders, and 4 per cent need special attention for substandard hearing. The average young adult has from one to two defects needing medical or dental attention; but 25 per cent have never been to a dentist and 18 per cent have never been to a physician.

The gratifying increase in American life expectancy is due almost entirely to medical discoveries, to progress in sanitary engineering, and to other public health measures enforced on us by the law with police powers. For these oft-quoted improvements the average citizen deserves no credit. Were his water supply not foolproof he would still die of typhoid. Were vaccination not forced on him he would still be ravaged by smallpox. The death rate due to accident has not changed in thirty years. Cancer whose control at present requires early diagnosis will continue to rise if we cannot be educated to consult a physician on our own. Without a constitutional amendment to require chest X-rays or to prevent burning the nutritional candle at both ends tuberculosis control is handicapped. The 10 per cent syphilis "shadow on the land" grows rapidly to over half length in the early forenoon of life and since there can be no law against exposure it will continue to contribute its share to the mounting number of heart fatalities. One-half of our hospital beds are filled with mental cases. Their number continues to rise as the growing mind is muddled by irrationality, scarred in emotional accidents, and singed by well-meaning, though misguided amateur parents and educators.

The greatest remaining frontier in American health is that of health education. Until we can teach people to enjoy health habits that are good for themselves and their fellows we stand helpless on this front. Wheatley reports that 50 per cent of malnutrition found in under-privileged children was due not to poverty but to a lack of understanding of child management and the attendant faulty eating habits. Accidents would be reduced by at least 20 per cent if man could be happy without alcohol. He who persuades one hundred heavy smokers to quit before age thirty may credit himself by this one act of education with saving the lives of twenty men in the following thirty years. Thirty-seven per cent of deaths among heavy smokers could thus be postponed until after the age of sixty and the incidence of coronary disease reduced eighty per cent among men in their forties.

How can the forces of health education rise to this stupendous task of making man's health habits the kind that will save him from destroying himself? The following principles and practices seem appropriate.

1. The periodic physical examination must become a part of our pattern of life. The health education program for individuals and classes should be conceived in part as a follow-up on the examination and its success measured in terms of health improvement.
2. The most potent "health education" today comes from dawn to midnight by radio and newsprint, not in the second hour on Tuesday and Thursday. New efforts must be made to purify this source. Simultaneously teachers may profit by studying the sales methods whose persistence in high-priced advertising time and space proves their effectiveness.
3. Health instruction must be scientifically based,

A paper presented at the National War Fitness Conference, Cincinnati, April, 1943.

essential, straight-forward, well-timed, and well-placed. This means textbooks written by persons who are at home both in the research literature of their subject and the thought processes and life habits of their readers. This means, for instance, sex education and preparation for marriage in high school and early college, while cancer and thrombosis wait awhile. This means that the athletic field, the locker room, the home, and the community are searched for "teachable moments" and cooperation. This means starting a better tooth diet for the next generation in the pregnant mothers of today and tomorrow.

4. The student should begin now to use the board of health, the neighborhood dentist and physician, the local clinic, and other community health agencies with whom he will live the remainder of his life.

5. We must find new ways of associating pleasant emotions with wise health conduct and unpleasant ones with the wrong way. This is difficult when the injurious effect of a health practice is far removed in time from its cause which is surrounded with temporary pleasures, real or artificial.

6. We must find ways to teach persons to think and feel without mind-breaking even as we teach them to run and jump without leg-breaking. They must be equipped with mental "first-aid kits" and with instructions for their use on the first appearance of mental symptoms.

7. We must secure the acceptance of responsibility for the welfare of the next generation through wise mate selection and the control of breeding by the unfit insofar as eugenics provides sound guidance.

8. We must find or create community agencies to share our concern for health education.

9. We need to remind ourselves of the educational potential in the personal example of a well-liked teacher.

As Physical Educators

We are convinced of the need for greater physical fitness in men who carry the burden of our safety on the field of battle and in heavy industry. I would like to add a few humbler reasons for physical ability. The girl whose shoulders and upper back ache after sitting through a day of tedious office or factory work would feel better if she had larger muscles in those parts. Her "scapula wings" would protrude less and her acromia would please more the eye of those who see her in evening gown if she had just a bit more muscle in these places. Only the law of disuse prevents a woman from chinning herself even once. We lack statistics on the home accidents that might have been prevented had she been able to hold or catch her weight when the chair on which she stood tipped from under her. A little more strength in shoulder and arms and she would not have spilled the hot dish over herself or her child. A little better heart would prevent the embarrassing breathlessness of the book agent who hurries to the office of a third-floor client. A little more of strength and endurance assures alertness in the important conference at the close of a strenuous day or the ability to enjoy an evening with the family. How many dances are ruined because the feet were not strong enough to keep from crying in pain.

Truly strength, speed, agility, and endurance are the sine qua non of our daily existence. Although the amount of each that is needed varies with the individual and his task their development is based on universal principles and well established practices.

The Law of Use and Disuse

Muscles hypertrophy and grow stronger with use. They atrophy with disuse.

The heart and circulatory system become stronger and more efficient in moving blood to active regions when repeatedly required to do this. At least in the young this is accompanied by an increase in the number of capillaries of heart, muscle, and nerve centers. Periods of inactivity are marked by regression in heart size, in number of capillaries, and in circulatory adjustments.

The lungs grow larger and more elastic in consequence of hard training. This startling discovery is amply verified by experiments on dogs, rabbits, and rats. It is a true hyperplasia in which all lung structures participate. It also is completely reversible in subsequent inactivity.

The Overload Principle

An "overload" is any exercise that exceeds in intensity or duration the demands regularly made on the organism. Muscles grow larger and therefore stronger only when their pulling power is taxed to the maximum. Thus their size is proportional not to the total amount of work done but to the amount of work done in a unit of time (i. e., intensity). Hence climbing, weight-lifting, wrestling, sprint running, push-ups and pull-ups are among the excellent muscle builders. And if you must play tiddly-winks, play with man-hole covers.

The heart muscle grows larger, stronger, and more efficient only when its performing ability is taxed to the maximum. This occurs in exercises of long duration and accounts for the superior hearts found in long-distance runners and swimmers, in six-day bike racers, and in cross-country skiers. Efforts of short duration, such as weight-lifting, do not sufficiently "overload" the heart to stimulate its development.

The lungs grow larger and more efficient only in response to exercises that tax them to their limit. Distance running and other endurance events do this.

Extension of the Psychologic Limit

A person's ultimate performance is limited by the physiologic capacity of the organs involved. But usually long before this physiologic limit is reached, performance is reduced or discontinued. This stopping point is the psychologic limit and is conditioned by slight aches, respiratory distress, and many mental factors,

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Physical Fitness Through Health Education

A Wartime Manual for High Schools

Abstract prepared by
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"PHYSICAL Fitness through Health Education for the Victory Corps"[1] has recently been released from press. This wartime health education manual for high schools was prepared by a committee appointed by the U. S. Commissioner of Education with the collaboration of the U. S. Army, the U. S. Navy, the U. S. Public Health Service, and the Children's Bureau. It is a companion manual to "Physical Fitness through Physical Education for the Victory Corps"[2] prepared similarly and now in wide use.

A Curriculum Guide

The manual contains curriculum materials for teachers and suggestions for administrative action required to implement a program of health education. Six important factors which contribute to health and fitness form the general objectives of the program outlined. They are: correction of physical impairments, prevention and control of disease, better nutrition, prevention of accidents and emergency care, daily program planning for balanced living, and sound mental attitudes. The program also stresses health preparation of students for special wartime services, including military, production, and community services.

In connection with each of the six health objectives, and with each of the three major fields of wartime service, pertinent information as it relates to high school youth in wartime is given. Suggestions for action which should provide incentive to students to take steps in identifying their own problems and working out solutions for them are also given. The materials presented are designed as a helpful guide for teachers of health and as a source of ideas on health instruction which can be incorporated in courses in physical education, biology, home economics, agriculture, industrial training, social studies, and other subjects. School health committees may also find the materials a useful tool for isolating health problems and for organizing to solve them.

Correction of Physical Impairments

Physical impairments are hampering the most effective use of manpower in war services. About 25 per cent of the eighteen to nineteen year-old boys called up for induction are rejected, many because of physical defects. The discovery and correction of remediable defects now existing among high school students will be of lasting benefit to the individuals beside being a direct contribution to the war program. The manual stresses dental and visual defects since they have the highest incidence in the high school age group.

The school, in cooperation with health agencies, should carry on extensive educational programs with students and parents and utilize community resources, including services and funds, for securing corrections for youths whose families cannot provide necessary care. Activities are suggested in the manual for student participation in programs for dental corrections and for the care and protection of eyes.

The Prevention and Control of Disease

War creates conditions conducive to the increase of disease. Movements of populations and overcrowding in war production areas favor its spread. Physicians and nurses are taken into the armed forces and there is likely to be a serious drain on hospital accommodations and supplies. Four specific diseases are discussed in the manual because of their wartime significance, especially for the high school age group. They are the common cold, tuberculosis, malaria, and smallpox.

The school should educate students regarding known facts about the cause, spread, prevention, and control of these and other diseases as needs are indicated locally, and should participate with health authorities in disease-control programs. Student activities suggested in the manual include investigation on disease prevention and control problems in the local community and assistance with measures for the control of disease.

Better Nutrition

Food is a "weapon of war," contributing to the max-

1 U. S. Office of Education, *Physical Fitness Through Health Education for the Victory Corps*, Victory Corps Series Pamphlet No. 3 (Washington, U. S. Government Printing Office, 1943) 20 cents.

2 U. S. Office of Education, *Physical Fitness Through Physical Education for the Victory Corps*, Victory Corps Series Pamphlet No. 2 (Washington, U. S. Government Printing Office, 1943) 102 pp., 25 cents.

imum efficiency and personal well-being of everyone—in industry, on the home front, and in the armed forces. High school students can contribute to their own health and efficiency and to that of their families and community through participation in a broad nutrition program.

The school should educate students regarding basic, daily food requirements, encourage them to take specific steps for improving personal nutritional status, and give them opportunity to participate in wartime nutrition programs, including the national and home food conservation program, group feeding, and school lunches. The manual contains many suggestive student activities to help schools in this task.

Prevention of Accidents and Emergency Care

Accidents aid the Axis. Now, when youths are being asked to undertake the most hazardous tasks the world has ever known, they must realize that safety is a means to an end, the end being to get the job done. Doing things expertly means using time, effort, machines, and human life to the fullest, not wasting them needlessly.

The school should give attention not only to accident problems that are with us in peacetime, but also to those which are associated with wartime activities. Provision should be made for planned instruction in accident prevention, first aid, and home care of the sick. In the manual appropriate student activities are suggested in connection with motor vehicle accidents as they relate to wartime conditions, safety in school under wartime conditions, industrial and farm safety, and emergency care.

Daily Program Planning for Balanced Living

The war has increased the difficulty of organizing time so that one can make a vital contribution and still have a reserve of strength and endurance for more tasks ahead. Every student should realize that planning for efficient use of time is part of the total planning for health. Each of the major activities, work, eating, recreation, and rest, should be given its due proportion of time and none overlooked.

The school should help each student to work out a plan for balanced living, and provide opportunities within the school day to make such living possible. Activities contained in the manual indicate the part which students can play.

Developing Sound Mental Attitudes

Both Army officers and mental hygienists recognize the importance of mental attitudes for personal fitness and for effective war effort. They emphasize the need for a widespread "will to win," the acceptance of war as a hard, long job that has to be done, and the abilities to "remain steady and competent under stress" and to adapt one's attitude toward conditions which cannot be changed. With the lowering of the draft age the need for developing emotional maturity sufficient to meet conditions which young people will encounter in the armed forces and industry becomes increasingly apparent.

The school should provide counseling service which will help each student find his place in useful war service; help students meet frustrations and grief inevitable in war; and provide situations in which students must make decisions and assume responsibilities as essential steps to growing up quickly. Student activities suggested are directed toward these ends.

Health Preparation for Air, Land and Sea Services

According to military officials, the problems inherent in military life indicate that pre-induction training in health and sanitation will be of definite assistance. An analysis of the health needs of the armed forces indicates this pre-induction training should stress problems pertaining to communicable disease, accidents, mental attitudes, and military hygiene as manifested at training centers and at the battle front. A knowledge of the body, including simple anatomy and physiology, with emphasis on those organs especially susceptible to disease or injury, is also considered important. Many details in regard to such problems will wisely await instruction after induction. A degree of conditioning now, however, will help create a willingness to cooperate in the military health program.

The school has a wartime responsibility for providing instruction in these matters. In the manual, activities are proposed which will help schools in this important task. Weekend field marches and camping trips are included in these activities since they provide excellent opportunity for the application of principles of sanitation and personal conduct required of military men.

Health Preparation for Production Services

Many high school boys and girls will be working in industry or on farms part or full time before the war is won. Every student preparing for or participating in production services should learn to recognize and understand those conditions hazardous to health in the occupation for which he is training or which he expects to enter. He is more likely to cooperate in control measures if he knows the hazards that are involved and the steps he can take to prevent or avoid them. In industry, these hazards may be associated with use of tools, electricity, flying particles, exposure to heat and glare, industrial poisons, noise, improper clothing, fatigue, and the like. In agriculture, they may be connected with sanitation, accidents from farm machinery and farm animals, and exposure to excessive heat and to poisonous plants, snakes, and insects.

The school, as a part of industrial and agricultural training, should help students develop sound health and safety attitudes and practices. Instructional activities in the manual suggest specific things which schools can help students do.

Health Preparation for Community Services

High school students will enter a wide range of com-

(Continued on Page 446)

Physical Conditioning Through Couple Activities

By

GEORGE J. ALTMANN

Kent State University
Kent, Ohio

THE expression "physical fitness" appears frequently in print and conversation today. It is usually thought of as a condition which permits sustained vigorous physical activity, especially that involving the entire body and covering considerable dstance. The factors which are of the greatest importance in physical fitness include:

1. Organic vigor, especially of the heart and lungs. Best activities for this include those involving movement of the entire body as in running, jumping, skipping.

2. Muscular power and tone, which contribute to speed, strength, and stamina. Activities requiring near maximum effort of the muscle groups concerned are best—as in lifting a weight or overcoming resistance, or running for a considerable time.

3. Skill or coordination, the inter-action of nerve and muscles leading to smooth, fluent, and efficient action. Activities suitable for this purpose are those which require control of the body and its parts as mat, apparatus, combat, and competitive stunts, and many games.

4. Agility, nimbleness or quick body action, especially that involving the legs. Best activities include stunts, rope skipping, boxing movements, games and races.

5. Mental attitude, a state of mind favorable to vigorous, concentrated, and sustained action. Activities which are enjoyed are most effective in this, usually those with a natural, combative, or competitive appeal as games, stunts, contests, and challenges.

6. Social urge or pressure, group approval and interest in the activity leading to more enjoyable and vigorous participation. Activities which the group considers appropriate and enjoys—usually games, contests, challenges, races, and the like approved by the group.

In our efforts to produce physical fitness we have been prone to think in terms of spectacular activities and situations such as commando activities, obstacle courses involving unusual features, forms of hand-to-hand combat, and the like. While these are all valuable, many of the common forms and methods used in ordinary physical education classes can be easily and effectively used often with a near maximum use of time, space, and equipment. Among these are various forms of couple or partner activities. Strenuousness of the activities and therefore their value in physical conditioning can be increased by lengthening the period, increasing the number of repetitions, the speed, weight, resistance, or the distance covered in the movement or activity.

Couple or partner activities when taught in an open-column formation and employing the mass or class method of instruction, provide a near maximum amount of activity in limited space and time even if the group is large. A circle formation can also be used to advantage with smaller groups.

Below are classified several forms of couple activities with examples under each. The lists are suggestive rather than complete, but should serve to indicate activities which can be used effectively in physical education classes in high school and college as well as with men in the armed services. The list of references

(Continued on Page 440)

Human Apparatus; Left, Parallel bar, chest stand; Right, Buck, head spring.
Couple Races; Left, Back-to-back hand's grasp; Right, Two men on a stick.
Carries; Left, Two-man tandem or chair carry; Right, Three-man horizontal carry.

NATIONAL ASSOCIATION NEWS

Dr. Neilson Resigns

DR. N. P. Neilson has resigned as Executive Secretary of the A.A.H.P.E.R. A copy of his official letter of resignation and a copy of a letter of acceptance by President A. H. Pritzlaff on behalf of the Board of Directors follow:

Mr. A. H. Pritzlaff
Board of Education
228 North La Salle Street
Chicago, Illinois

Dear Mr. Pritzlaff:

I hereby tender my resignation as Executive Secretary of the American Association for Health, Physical Education, and Recreation, effective December 15, 1943, in order to become Professor of Physical Education and Head of the Department of Health and Physical Education at the University of Utah. I have enjoyed my work very much these past five years and it is with regret that I leave the position of Executive Secretary. As a life member, please be assured that I shall be happy to continue to serve the Association in every way possible.

Cordially yours,

(Signed) N. P. Neilson
Executive Secretary

Dr. N. P. Neilson
Executive Secretary
American Association for Health,
Physical Education, and Recreation
1201 16th Street, N.W.
Washington, D. C.

Dear Dr. Neilson:

I received your letter of August 24 in which you tender your resignation as Executive Secretary of our Association to become effective December 15, 1943, in order to take over your new duties at the University of Utah.

On behalf of the Board of Directors, it is with regret that your resignation is accepted.

I am indeed sorry that you feel it necessary to leave us and am sure I speak for the members of the Association when I say we have been happy to have you as our executive officer during the past five years and extend to you our very best wishes in your new duties.

Sincerely yours,

(Signed) August H. Pritzlaff
President

At the National War Fitness Conference held in Cincinnati, Ohio, April 13-16, 1943, the Board of Directors took the following action which was approved by the Representative Assembly:

1. In view of the uncertainties and insecurities of the times as generally and widely affecting tenures in employment, it is recommended to the Representative Assembly that all employees of the American Association for Health, Physical Education, and Recreation be placed upon a year-to-year basis for the duration of the emergency;

2. In recognition of faithful, conscientious, and meritorious service rendered by the incumbent, it is recommended that Dr. N. P. Neilson, be re-employed, effective September 1, 1943, on the above basis; and

3. In consideration of the possibilities of sudden and unexpected vacancies while times are critical, the Board of Directors shall have compiled a file of potential candidates for the position of Executive Secretary and in case of an interim vacancy shall hold power from the Representative Assembly to employ a replacement, until appointment by the next ensuing Representative Assembly shall become possible.

In order to expedite the filling of the vacancy, persons interested in the position of Executive Secretary of the Association are asked to send to the President, A. H. Pritzlaff, 228 North La Salle Street, Chicago, Illinois, no later than October 15, a statement of their qualifications indicating:

a. Personal history—age and other personal factors which might be considered in the selection of candidates.
b. Education—degrees.
c. Experience—health, physical education, and recreation.
d. Evidence of ability to write and speak.

The new membership blank. Reverse side is shown on opposite page

AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION
A DEPARTMENT OF THE NATIONAL EDUCATION ASSOCIATION
1201 SIXTEENTH STREET, N. W., WASHINGTON 6, D. C.

APPLICATION FOR MEMBERSHIP

Enclosed find payment for..... membership. Amount $.....
(Type of Membership—See Reserve Side of Blank)

Begin membership with month of Oct..... Jan..... April..... (check one): This is a (check one) { Renewal of Membership..... / New Membership .....

Name ..... (Type or print clearly) { Address for Publications .....

Are you a member of the National Education Association? Yes.....; No..... To become a member, write Willard E. Givens, 1201 Sixteenth Street, N. W., Washington 6, D. C.

Student membership must be endorsed by head of major department.

Endorsement .....
(Head of Major Department)

(See other side)

e. Activity in the Association—including activity in state and district associations.

f. Affiliation with other organizations.

g. General statement on aptitude for this particular position.

The President will send copies of the applications received to members of the Board of Directors for evaluation and rating. A special committee composed of the Past-President, President, and President-Elect will review the reports received from the Board members, and the name of the highest ranking candidate will be sent to the Board of Directors and to the Representative Assembly for approval. It is anticipated that the new Executive Secretary appointed will take office January 1, 1944.

Membership Promotion

THE record of total membership in the A.A.H.P.E.R. since 1935 reads as follows (records taken in the month of June):

1935	1936	1937	1938	1939	1940	1941	1942	1943
6,479	7,501	8,092	8,555	8,393	10,231	9,301	8,626	7,853

These records show that there was a general increase in membership until 1940 and since that time there has been a consistent decline. The decline in membership, due to obvious causes, seriously affects the budget of the Association and hence the amount and type of service that can be rendered.

While the Association has a list of members in the Washington office it does not have available lists of workers who are good prospects for membership except as these lists are made available by district, state, and local associations. It has found that a person-to-person campaign is more effective than a mimeographed letter campaign and therefore the district, state, and local associations are in the best position to put forth this personalized effort.

It is suggested that the local, state, district, and national associations join hands in a concerted drive to secure new members during the months of October and November. The Executive Secretary of the National Association will work directly with the district and state association presidents in this matter according to plans developed by them. The present membership lists and other materials will be made available.

Heretofore, persons have been free to join the Association during any month in the year. This policy has multiplied the amount of work which must be done in connection with recording memberships, sending membership cards, maintaining files, and addressograph plates, and the sending of expiration notices. To meet new labor shortages and costs, all new memberships and all renewals will be entered as of the months of October, January, and April with the yearly expirations coming in September, December, and March.

To carry out this new practice and in order to make available to the chairmen the names of members of the various working sections of the Association, the new membership blank (reproduced here) has been designed. Membership blanks of previous issue should be destroyed. Write to the Washington office for copies of the new blank.

This is our Association. We have a golden opportunity to advance our cause. Let us all do everything we can to increase the membership of our local, state, district, and national associations. Cooperative effort and a federation of units into a strong national association will permit us to speak with power and effect.

A Letter from Mr. Anderson

MR. W. G. ANDERSON, our Founder, whose birthday was September 9, wrote to the national office as follows: "I am well, active, and do not show my entrance into the 84th year."

The United States Junior Citizens Service Corps

IN ESTABLISHING the Junior Citizens Service Corps, the United States Office of Civilian Defense accepts the proffer of assistance from young people whose initiative and strength will help the total war effort. The Junior Citizens Service Corps is a means of Federal recognition of the contribution that boys and girls are making to their own communities and to the nation. To be eligible for enrollment in the Junior Service Corps, a boy or girl under 16 must be a member of a group under a qualified adult leader.

The major emphasis of the Junior Citizens Service Corps is on extra-curricular activities, whereas the principal concern of the High School Victory Corps is curricular. Pupils in elementary schools and junior high schools will be particularly interested. For information and printed literature write to Junior Citizens Service Corps, Office of Civilian Defense, Washington, 25, D. C.

News About Former Staff Members

DR. E. D. MITCHELL, former Editor of the Journal and The Research Quarterly, is now Lt. Comdr. E. D. Mitchell, Physical Training Section, Headquarters, Eighth Naval District, Federal Building, New Orleans, Louisiana. Lt. Comdr. Mitchell has been in his new post since February of this year.

Betty Noyes, former Assistant Secretary in the Washington office, is now a recreational director for the American Red Cross with the Able-Bodied Forces in Australia. Those of our readers who would like to drop her a note may do so through A. R. C., A.P.O. 924, c/o Postmaster, San Francisco.

Mark Brouwer, former Advertising Manager of the Journal, is now Editor of *The Reading Hustler,* Reading, Michigan.

YOUR NATIONAL PROFESSIONAL ORGANIZATION —JOIN NOW!—

Type of Membership	Includes	Cost
PROFESSIONAL	Journal and Research Quarterly	$5.00
ACTIVE	Journal of Health and Physical Education	$2.50
STUDENT	Journal of Health and Physical Education	$1.50
STUDENT PROFESSIONAL	Journal and Research Quarterly	$3.00
LIFE	All privileges of professional membership. Single payment	$80.00
	Installment plan—ten annual payments of ten dollars each	$100.00
SUBSCRIPTION TO RESEARCH QUARTERLY		$3.00

Membership is open to all who are professionally engaged in health, physical education, and recreation. Other interested persons may become associate members on payment of the regular membership fee.

(See other side)

Check the Sections in Which You Wish to be Active

1.—Dental Health
2.—School Physicians
3.—School Nutrition
4.—School Nursing
5.—First Aid and Safety Educ.
6.—Therapeutics
7.—Health Instruction
8.—Mental Health
9.—Public School P. E.
10.—Coll. & Univ. P. E. for Women
13.—Dance
12.—Private School P. E.
14.—Women's Athletics
15.—Men's Athletics
16.—Intramural Athletics
17.—Municipal Recreation
18.—Private Recreation
19.—Industrial Recreation
20.—Park Recreation
21.—School Recreation
22.—College Recreation
23.—Institutional Recreation
24.—Camping & Outing
25.—Adm. & Supv.
26.—Meas. & Evaluation
27.—Research
28.—Student
29.—Prof. & Public Relationships
30.—Professional Educ.

Priorities for Physical Fitness Equipment and Supplies

IN AN effort to keep agencies directly concerned with the promotion of physical fitness informed concerning priorities on certain essential equipment for physical fitness activities the Committee on Physical Fitness of the Federal Security Agency submits the following:

The Office of Price Administration has recently lifted its restrictions on public purchasing of football, baseball, and track shoes, so that they may be purchased as before the war rationing program began.

The case of basketball shoes, however, is different. Colleges and schools may furnish basketball shoes to their pupils if the institutions retain title to the shoes. These shoes may be purchased from funds derived from student activity fees, athletic funds, or other general funds.

Individuals also may purchase basketball shoes provided they use ration stamp No. 18, as they would for a pair of street shoes. If, after purchasing a pair of basketball shoes with a ration stamp, they later urgently need to purchase a pair of street shoes and find that there are no shoe ration stamps left in the family, they can make application to their local rationing board which may give them the permission and authority for the needed purchase.

The following items of indoor and outdoor gymnasium equipment have been approved for manufacture and purchase by schools:

1. Swimming pool equipment such as ladders, platforms, diving board platforms, and fulcrums.
2. Climbing poles.
3. Climbing ropes.
4. Parallel bars.
5. Horizontal bars.
6. Stall bars.
7. Flying and traveling rings.
8. Horizontal ladders.
9. Basketball goals.
10. Volleyball standards.

A school may order any one of these items directly from the manufacturer provided they send a copy of their order to D. W. Lando, War Production Board, Jefferson Junior High School Building, Washington, D. C.

With respect to securing all other athletic equipment and supplies, probably a general statement of the situation is that one can purchase practically anything that is available on the shelves of the retailers. Unfortunately, practically everything is gone and the shelf stock is exhausted. The situation is the result of:

1. Large-quantity purchases by the armed forces.
2. Large purchases by local army units or camps near particular local communities.
3. Restriction by WPB and OPA on use of critical materials needed in fabrication of athletic goods.
4. Transformation of factories formerly manufacturing athletic equipment and supplies into manufacturers of war materials.

To cope with this situation and realizing the need for tools for national physical fitness, the Committee on Physical Fitness of the Federal Security Agency stimulated the formation of a Committee known as the "Temporary Joint Committee on Essential Materials for Physical Fitness," under the chairmanship of Mr. Avery Brundage. This Committee has assumed responsibility for:

1. Representing civilian consumer interests.
2. Being a source of information on consumer needs.
3. Being a liaison body between various federal critical material boards and the consumer.

In carrying out these responsibilities the Committee:

Formulated a resolution which was endorsed by twenty-two different outstanding national physical education and athletic sport agencies.

Appointed Dr. Frank S. Lloyd to represent the Committee on civilian needs for physical fitness material to the War Production Board at a meeting of this board with the Army and Navy on April 26, 1943.

Submitted estimates of anticipated equipment needs of civilians along with those of the Army and Navy to Mr. D. W. Lando, Chief of the Sporting Goods Section of the Consumers Durable Goods Division of the War Production Board. These estimates of civilian needs were secured through the cooperation of the Athletic Institute of America and a number of the manufacturers of physical fitness equipment and supplies.

Kept in constant touch with the War Production Board through bi-weekly conferences with Mr. D. W. Lando, the Chief of the Section and his assistant, Mr. Newton Priestly.

The results of these efforts cannot be predicted but it is felt they will lead to civilians being considered as well as the Army and Navy in the allocation of critical materials for the manufacture of physical fitness equipment and supplies for civilian physical fitness programs.—Reported by *Harlan G. Metcalf*, Executive Secretary of the Temporary Joint Committee on Essential Materials for Physical Fitness.

Eastern District Association News

Connecticut

The officers for 1943-1944 are as follows:

President—Caroline M. Doe, East Hartford; 1st Vice-President—Gerald B. Grinnell, Farmington; 2nd Vice-President—Josephine Rogers, Storrs; Secretary—E. Eleanor Smith, Shelton; Treasurer—Mrs. Mary Smith, Orange. The state Physical Education Association will hold its first fall meeting on October 29 in either Bridgeport or New Haven.

News from the Therapeutic Section

By Ellen Kelly, University of Minnesota

The Workshop in Corrective Physical Education offered at Teachers College, Columbia University, under Dr. Josephine I. Rathbone presented an unusual opportunity both from the standpoint of method and course content. The enrollment was much larger than anticipated and totaled fifty-five. Included in the group were students from general education, orthopedic nurses, administrators, and candidates for the teaching certificate in New York State. Small workshop groups, selected according to particular interests and previous training, investigated such topics as programs for asthenic individuals, work for pre-partem and post-partem cases, programs for young people showing psychopathic tendencies, analysis of the Kenny method for poliomyelitis. Particularly worth while were visits to many of the outstanding hospital clinics available in New York City. Lectures on scoliosis were given by Dr. Cobb of the Hospital of Special Surgery and by Dr. Von Larcom of the New York Orthopedic Hospital. Dr. Hans Crous of the Vanderbilt Clinic spoke to the group on Sprains and Joint Strains. Dr. Gurevitch of the New York Orthopedic Hospital gave an interesting discussion and demonstration of orthopedic care of children in casts. Other tours included the Physical Therapy Department at Vanderbilt Clinic, the Institute for the Crippled and Disabled. Mrs. Fitzgerald of the Association for the Aid of Crippled Children talked to the entire group in her office about community aspects of the care of crippled children.

Miss Loraine Frost, formerly of the Department of Physical Education for Women at the State University of Iowa and Chairman of the Therapeutic Section during 1941-42, is forsaking the field of physical education for that of medicine. The profession as well as the Therapeutic Section are grateful for the many contributions which Miss Frost has made to the field of therapeutics. Our best wishes go with her in this new field.

* * *

Miss Helen Sue Weaver has been working on the problem of corrective physical education in the elementary schools of Austin, Texas, for several years. Most particularly has Miss Weaver recognized that adequate motivation is the key to effective teaching of young children. Miss Weaver has made some very pertinent observations upon the results of teaching by the direct method, the indirect method, and a combination of the two. It is hoped that these observations will be published in the near future, if Miss Weaver, who is at present serving her country in the SPARS, is able to take time for writing.

Southwest District Association News

NEW MEXICO . . . . . By Mrs. Leo L. Gleaves

During the summer, two physical fitness institutes were held in the state, the first at the University of New Mexico in Albuquerque with 61 enrollees, July 30-31; the second at Highlands University, Las Vegas, with an enrollment of over 50, August 10-11. Demonstrations were conducted the first day. Panel discussions on the phases of the compulsory physical education program which goes into effect this fall in New Mexico were held the second day.

Helen McBurnett, from the physical education department of Louisiana State University, has been appointed acting head of the Women's Physical Education Department at New Mexico State Teachers College, Silver City.

Jerre Reid, president of the New Mexico Association for Health, Physical Education, and Recreation, has accepted the position of Director of Intramural and Physical Education at the New Mexico School of Mines, Socorro. He succeeds Ray Dorsett who went to New Mexico A. & M. as coach and athletic director. Ralph Bowyer has accepted the job of coach for Carlsbad High School succeeding Jerre Reid.

Major George W. Braden of Altadena, California, western representative of the National Recreation Association, was in Albuquerque recently on his semi-annual tour of member organizations.

Dr. Robert Hughes Parry, medical officer of health, Bristol, England, spoke at the annual meeting of the New Mexico Public Health Association in Albuquerque. Dr. Frank C. Diver, Raton, president of the association, was in charge of the sessions. Other speakers of the three-day conference included Dr. John L. Rice, former commissioner of health of New York City, Miss Dorothy Deming of the merit system staff of the American Public Health Association, and Dr. Reginald Atwater.

A state Parent-Teacher institute, held recently in Albuquerque, had as its speaker for a luncheon session Mrs. K. A. Yoder, State President of Parent-Teacher Associations. She emphasized the need of close attention to the health of youth during wartime and the importance of wholesome recreational activity in the prevention of delinquency among youth.

Educators of five southwestern states gathered for a six-day meeting in Santa Fe for round-table discussions of educational problems among Spanish-speaking groups. The conference was sponsored by the Office of the Co-ordinator of Inter-American Affairs aided by the University of New Mexico and New Mexico Highlands University. Health and nutrition were two of the principal subjects for discussion.

Dr. Derrie C. Parmenter of Nashville, Tennessee, began his duties as District Health Officer at Albuquerque this month.

The Border Conference, composed of Texas, New Mexico, and Arizona colleges, will be broken up for the duration, conference officials disclosed, in the wake of the War Department's decision to ban all soldier-students from inter-collegiate sports. Two colleges in the conference hope to play football schedules this fall: New Mexico University with a Navy school detachment, and Flagstaff Arizona Teachers with a Marine school.

Mary A. Thompson, instructor in physical education at the University of New Mexico, has been made Red Cross Water Safety Chairman for Bernalillo County.

Eda Anderson, former physical education instructor at Las Cruces high school, has recently finished basic training and is awaiting assignment at the 2nd WAC Training Center, Daytona Beach, Florida.

UTAH . . . . . By Bernice Moss

Dr. N. P. Neilson, Executive Secretary of the American Association for Health, Physical Education, and Recreation, will become the Director of the Department of Health and Physical Education at the University of Utah on December 13. Dr. Neilson is a native of Utah and graduated from the Utah State Agricultural College before moving to California. The physical education teachers in Utah are happy he has chosen to return to his native state. Dr. Neilson will take the position formerly held by Dr. H. L. Marshall as head of the department. Dr. Marshall has been appointed Professor of Preventive Medicine in the new four-year medical school established recently at the university and will continue as Director of the Student Health Service.

The opening of schools in September confirmed the prediction made previously that many high schools would lack trained physical education teachers. The shortage is more acutely evident in the rural high schools. Both boys' and girls' departments are suffering from lack of leadership. The situation is not as critical as it would have been had not some Utah graduates returned to take positions in the state. Pete Wilson, B. Y. U., 1935, has come to North Summit High School at Coalville from a high school in Iowa. Kenneth Gardner is at Beaver after having taught in Afton, Wyoming. Elmo Brady has accepted a position at South Summit at Kamas following two years in war industry. Ross Nielsen is at Irving Junior High in Holloday following a venture in business. Many married girls trained in the field have returned to teaching in order to alleviate the critical situation.

For the second consecutive year, the Utah Education Association will not hold its annual state meeting due to travel and housing limitations. The Utah Association for Health, Physical Education, and Recreation will likewise have to dispense with its annual session. In lieu of the annual meeting the officers of the association hope to be able to hold regional conferences though travel restrictions may make these impossible. The Executive Committee met recently and worked out a plan to hold an election of officers by mail. Lee Simmons, President-Elect, will assume his duties as President in the very near future.

Griffith Kimball, physical education instructor at Draper Junior High, is conditioning his boys preparatory to the beet-topping season. Last year he conducted an excellent conditioning program for six weeks preceding beet vacation and his boys topped more beets per capita than any group in the county. Griff believes it was due to their superior physical stamina.

The 1942-43 edition of the annual bulletin, "How We Do It In Utah Schools," has met with enthusiastic response from members of the Utah Association for Health, Physical Education, and Recreation. The bulletin was distributed in April and contains twenty articles written by Utah physical education teachers reporting phases of their programs. The war emphasis is ably described in several of these articles. Additional copies are available for 25c per copy.

CALIFORNIA . . . . . By Margaret King

Florence E. Weeks, Supervisor of Physical Education for Girls, Oakland Public Schools, and president-elect of the San Francisco Bay Section of CAHPER, will assume the presidency of the section for the coming year in the place of Dr. Oliver Byrd of Stanford University. Dr. Byrd is to take intensive study in the field of medicine which will not permit time for the duties connected with the Bay Section presidency.

Through the coordinated efforts of all the agencies concerned with youth activities, the Palo Alto municipal recreation department this summer presented a program of sports, games, hobbies, dramatics, and other types of fun. High on the list of attractions was a "junior commando" or obstacle course. Special features were tournaments of all kinds, skating parties, and outdoor folk dancing. Field days and competitions between playgrounds were held. Each playground had its own tournaments. Play-offs for city championships were held at Rinconada.

Camp Quito, Palo Alto's day camp run by the Girl Scout council, accommodated many of the girls of Palo Alto during the summer months. The camp, situated a mile and a half from Palo Alto, was open to any girl who had finished the second grade. Camp sessions were held three days a week. Activities included nature study, hiking, exploring, archery, games, handicraft, dramatics, singing, and other outdoor activities. Once a week there was an overnight camping trip.

A "stay-at-home" program in connection with the city recreation department community activities featured many interesting and enjoyable things to do for any boy or girl of the communities served by the Stanford Area Scout Council. Activities presented were archery, swimming, camp fire programs, community (scout) circus, a model camping demonstration, boating and sailing, and model airplane and glider meet.

Not all of the activities in the summer recreational program had to do with physical prowess. The social events also came in for a fair share of attention. Folk dancing for adults was held on Monday, Tuesday, and Thursday evenings; on Fridays the junior folk dancing group met. A series of Saturday evening dances were also held. In addition, the adult theatre, carried on a full program. A new feature of the summer's activities was the establishment of a junior orchestra which played for some of the Children's Theatre presentations.

Martha Jane Leonard, former physical education instructor at the San Leandro High School, left recently for officer's school in Massachusetts where she will take the WAVE indoctrination course.

Bev Wade, former Supervisor in the Oakland Recreation Department, is stationed at Camp Allen, Norfolk, Virginia. Howard Holman, who was Assistant Director, is also stationed at Norfolk. Bev edits the camp's weekly mimeograph news sheet and Howard is business manager of the *Seabees Coverall*, another chronicle of events.

Luell A. Weed, assistant professor of physical education for women, Stanford University, has been granted a leave of absence for the coming year to act as assistant to the director of personnel for the Pacific Area Division of the American Red Cross, headquarters for which is in San Francisco. Miss Weed left for Washington Sept. 1 to receive basic training.

The R. Tait McKenzie Memorial

Let us in turn, honor this man who brought such great distinction to the physical education profession through the fame he achieved throughout the world as physical educator, artist, physician, and patron of culture; and let us hold him forever before the eyes of our young men and women in schools, colleges, and allied institutions.

Jay B. Nash.

AS MOST readers of the Journal know, the American Association for Health, Physical Education, and Recreation has decided to create a perpetual memorial to Dr. R. Tait McKenzie. He has brought great honor to our profession and we in turn will honor him. In that undertaking we solicit the participation of all members of our Association.

Outstanding in the plans for the R. Tait McKenzie Memorial is the decision to erect a bronze casting of the Column Of Youth in the N. E. A. building in Washington. This remarkable bronze figure will rest on a suitable pedestal bearing an appropriate inscription.

All contributors of $5 or more to the Memorial Fund will be awarded a three-inch bronze medallion of "Joy Of Effort" which is one of the most popular of Dr. McKenzie's creations. It is hoped that most contributors will give $10 or more. Contributors of less than $5 will be awarded a print of one of the McKenzie creations which is suitable for framing.

Contributors are requested to mail their subscriptions as soon as possible to the Chairman of the Memorial Committee, Grover W. Mueller. Address all communications to Grover W. Mueller, 504 Administration Building, Board of Education, Philadelphia, Pa.

A list of the subscribers to the R. Tait McKenzie Memorial Fund will be published in each issue of the *Journal*. The reader is referred to the lists published in the *Journals* for June and September. The following list includes all names of persons who have contributed since the September issue of the *Journal* went to press:

Lady Marjorie Pentland, Guilford, Surrey, England.
Louis C. Schroeder, Washington, D. C.
Louise S. Cobb, Berkeley, California.
Leah J. Gregg, Austin, Texas.
Helen W. Hazelton, West Lafayette, Indiana.
Elizabeth Kelley, Claremont, California.
Alice Schriver, St. Louis, Missouri.
Joseph Brown, Princeton, New Jersey.
William V. Krebs, Philadelphia, Pa.
Anne Schley Duggan, Denton, Texas.
Don Cash Seaton, Springfield, Illinois.
Elizabeth Graybeal, Duluth, Minnesota.
Dorothy S. Ainsworth, Northampton, Mass.
Helena M. Kees, Highland Park, New Jersey.
Ruth Elliott, Wellesley, Mass.

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How We Do It

The Choreogram

EVISED primarily as a visual aid in the learning of spatial relationships pertaining to the dance, and group dancing in particular, the Choreogram (coined from the Greek, meaning "dance") was soon found to be suitable in dramatics, where spatial relationship also presents a teaching problem. The function of the Choreogram is to accelerate learning and to facilitate the comprehension of floor patterns.

The usual method in this sort of instruction is auditory rather than visual. A ballet group in training is stimulated to action by the verbal directions of the leader. Usually, abstract concepts for dividing space must first be individually and subjectively translated into visual representation before the prescribed movement of the group can take place.

The Choreogram strengthens and supplements the auditory stimulus by increasing the number and quality of associations in the learning process. Being a physical object, and thereby allowing the use of three planes, it is markedly superior to the blackboard, which allows the use of only two dimensions. Beside attracting attention, arousing curiosity, and imparting the desired information dramatically, the Choreogram has the added advantage of inviting pupil participation.

Since it is not as yet commercially available, directions for making it will be given here. The instrument has as its base a circular disc of wood, which may be about one-half inch thick and of an approximate diameter of twenty-four inches. This is covered with a circle of bright red linoleum of the same size, affixed to the disc with thumb tacks and preferably cut by pinking scissors, to avoid raveling. At the center of the disc mount a pivot, upon which pivot fasten a square of plywood approximately one-quarter inch thick and twelve inches square in size, which has been covered with a checkerboard linoleum of sharply contrasting colors. The finished platform represents the stage or floor space. Miniature lead figures of the type found in any dime store represent the dancers, or actors. The choice of the toy figures should be conditioned by the group concerned; i.e., nurses or girl figures for girls, soldiers or knights for boys, etc.

The procedure in using the Choreogram is as follows:

1. Place it on a table.
2. Have the group gather about the table.
3. Have the pupils watch you move the figures through their various sequences of movements through space. These movements should be accompanied by verbal explanation on your part.
4. Move the figures through a prescribed sequence of dance patterns without verbal explanation.
5. Repeat, using the auditory stimulus with the visual. (Such verbal instructions as are generally employed in giving stage directions or dance commands should be used here.)
6. Assign a figure to each pupil, indicating at the same time that the figure is meant to represent him.
7. Then let each pupil undergo the physical and visual experience of moving his figure through the prescribed sequence of patterns.
8. Call the student's attention to the two points of view from which a dance pattern or stage grouping may be considered. Call the first position the viewpoint of the actors looking out toward the audience. The second position may be termed the reverse.
9. Direct the pupils to begin by moving the figures as though they (the pupils) were facing the audience. This will give them an experience similar to that which they will undergo in the actual performance.
10. Now, so that they may see the pattern as the audience will see it, the platform may be pivoted a half turn and the movements of the figures repeated.

The principal advantage of the device is that exits and entrances, group clusterings and changes may be very easily seen. Another advantage is the time-saving element. A teacher can move a half-dozen figures on the platform in a few seconds, whereas the initial attempt to move a like number of human beings through the same pattern on a floor space thirty or more times the size would take appreciably longer, even if the questions and mistakes of the human group were discounted.

The figures offer no such problem. The pupils, by observing the various movements on the platform, can "see themselves as others see them." It is an advantage for each pupil to get a panoramic concept of the group action, as well as his own part in it. Moreover, the whole pattern of the dance is better seen from the vantage point of looking down, just as it is most satisfactory to watch a ballet performance from a position in the balcony. The Choreogram gives the equivalent of this.

The Choreogram also gives the pupils the total picture and thereby an impression of the unity of the group. In addition to this, the device permits the pupil to understand his relation to the whole.

As applied to any staged production where rehearsal time may be limited, the Choreogram has even more significance. Another advantage lies in its ability to reveal poor groupings. Inappropriate balance and other violations in spatial relationships should be avoided and the Choreogram will aid in detecting such errors.

As an improvising device, it has an advantage to the teacher who wishes to create or to try out original choreographic patterns without resort to an abstract visualization or to the use of the human material. In this connection, it will aid a producer in cutting down rehearsal time, and the expense of training the professional dancer. The time saved here might well be used in perfecting the more refined techniques of the performance.

Already successful in working with small groups, the Choreogram is based on sound psychological principles. It will probably be of greatest assistance as a practical aid to teachers of dramatics and to teachers of physical education who might be interested in folk dancing of the group type.

CHARLOTTE LOUISE GREENE
North Jersey Training School
Little Falls, New Jersey

Flashball

IN AN attempt to devise a game that was more or less familiar for the purpose of conditioning and maintaining activity with a minimum of pauses, flashball was developed at Oregon State College. Flashball is basically football but utilizes portions of rugby, speedball, basketball, and marathon running. The game has a few simple rules and provides a maximum of sustained effort. It is adaptable to large groups, and is easily learned. It provides plenty of action with a possibility of developing some fundamental football skills, together with the ability to think and react quickly under game conditions.

A trial period of four months has amply demonstrated that the game provides the ingredients that serve the purpose for which it was designed. It has been tried with spring football training, regular gymnasium classes, and an Army Specialized Training Unit.

General Conditions

1. Rules are simple.
2. A minimum of equipment is required. Gym suits and football shoes are standard equipment although regular gym shoes may be worn where football shoes are not available.
3. Officiating is easy. In fact, the game may be played without an official.
4. The game is aggressive, develops coordination and teamwork, and puts a premium on quick thinking and accuracy in handling the ball under fire.
5. Player interest is high. All players are eligible.
6. No standing around. Every player works on every play.

Rules

1. Nine players on a team. (This number may be varied one or two according to the number of men to be handled.)
2. The ball can be passed in any direction at any time. There is no limit on the number of forward passes which may be attempted in the same down.
3. The ball may be run or passed and a down occurs when a player is touched with both hands below the *waist* line.
4. A team is allowed five downs to make the length of the field.
5. The team loses possession of the ball whenever there is an incomplete pass or a fumble except on pass from center; then only loss of down occurs. Loss of ball to opponents at the spot where ball touches ground.
6. No huddle is permitted. (This speeds up the game.)
7. Screen blocking is permitted and players must keep their feet on these blocks.
8. Goal posts and point after touchdown are eliminated.
9. Play a fifth down pass the same as punt in football which means that the ball can be picked up and advanced by a player of the team on defense.
10. All other conditions to be covered by regular football rules.

JAMES A. CARR
Oregon State College
Corvallis, Oregon

Live Handballs from Dead Ones

THE difficulty of obtaining handballs with an adequate liveliness has increased to a very considerable extent during the past months. At the suggestion of Dr. J. F. Bovard, of the University of California at Los Angeles, a method involving the increase of the gas pressure in the old balls has been used with a considerable degree of success.

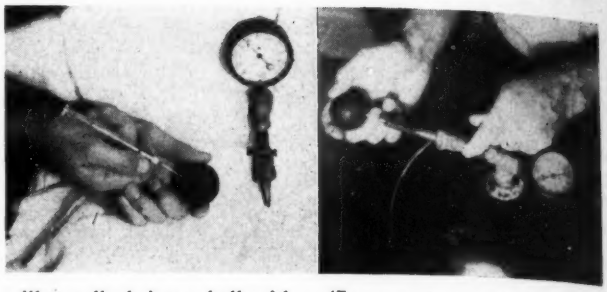
Handball specifications call for a 62- to 65-inch bounce from a 100-inch drop at 68° F. When the bounce of a handball drops below 50 per cent, its response is that of a dead ball to the least critical of handball players. Examination of numerous handballs showed that most of the balls available were much below the 62 per cent bounce specification. Even balls which had not been previously used frequently showed less than a 50 per cent bounce. This deterioration was undoubtedly due to the fact that the balls had been held in storage too long.

The correction of the difficulty has been accomplished in the following manner. A small hypodermic syringe is filled to the 1 cubic centimeter mark with rubber cement fluid. If the bore of the needle is so small that it is difficult to force the rubber cement through it, the latter may be thinned by dilution with a little light petroleum solvent. A hypodermic needle, size #20 to #22, is then fastened to the head of the syringe, and the needle is pressed through the wall of the handball at a considerable angle from the perpendicular to the surface. Holding the ball so that the needle enters on the underside, the rubber cement is then forced into the ball. Leaving the needle in place in the ball, the base of the needle is connected to a cylinder carrying 35 to 40 pounds per square inch of air pressure by means of a short piece of rubber pressure tubing. The latter is wired to secure gas tight joints at the needle and the outlet to the cylinder. The valve of the cylinder is then opened and a minute or two allowed to elapse for the pressure in the ball and the cylinder to reach equilibrium.

The ball is now pulled from the needle and while held firmly in the hand, with the needle hole down, is pounded vigorously on a table top with half a dozen blows. It should then be immersed in water at once to test for leaks with further pounding if any bubbles appear. Only in very rare cases has it been impossible to stop all leaks by this method.

The syringe and needle should be cleaned by squirting light petroleum solvent and then stored in a wide-mouth bottle in the same liquid. Any petroleum liquid of the kerosene fraction or lighter will do. Carbon tetrachloride is unsatisfactory though petroleum dry cleaning solvents are acceptable.

The ball should then be tested for bounce. This treatment



will usually bring a ball with a 47 per cent or more bounce up to the 62 per cent minimum specification. Of course, if the rubber has deteriorated to too great an extent, no amount of pressure will bring it to new ball specifications. At forty pounds gauge pressure the balls show a tendency to swell and pressures above this may cause the ball to split in active play. This is readily understood in view of the fact that new balls are prepared with a pressure of about 22 pounds to the square inch.

The balls gradually lose pressure and liveliness as is shown by the following: Ball A with less than a 50 per cent bounce was repressured to a 68 per cent bounce; on the next day it was still 68 per cent; the third day, 64 per cent; the fourth day, after being played with, it had a 64 per cent bounce; the fifth day, a 64 per cent bounce; the eighth day, a 59 per cent bounce; the fourteenth day, a 58 per cent bounce; and on the sixteenth day the ball had a 57 per cent bounce. Ball B was repressured from less than a 50 per cent bounce to a 66 per cent bounce; the second day it had a 62 per cent bounce; the third day, a 60 per cent bounce, the fourth day, 59 per cent; the fifth day, a 58 per cent bounce; the eighth day, a 58 per cent bounce; the fourteenth day, a 56 per cent bounce; and the sixteenth day, a 56 per cent bounce. Apparently such deterioration is characteristic of new balls as well as those which have been used. The new ones probably lose pressure and hence liveliness at a slower rate as their initial pressure is lower.

Certain users of the repressured balls have reported that the balls have a tendency to show an erratic bounce, but such criticisms have been rare. The repressured balls have been used at University of California at Los Angeles for over a year now, and most of the players are enthusiastic at the results of this method of revitalizing handballs.

The writers had played amateur handball for a number of years but had not had occasion to look up specifications for bounce until the possibilities of repressuring were investigated. Our experience indicates that by the time handballs reach the average amateur player they have already deteriorated to near the 50 per cent bounce stage. We feel that we had never really known a lively ball which met tournament specifications until we used these repressured balls.

Comparison of balls filled with nitrogen, hydrogen, carbon dioxide, and oxygen was made with the hope that certain of the gases would maintain the ball with adequate liveliness over a longer period of time than the others. It was found that the differences in the rate of loss of bounce were so slight that no definite conclusions could be drawn. It would seem that gases with a low chemical activity towards rubber and high density would be best for the purpose since balls filled with such a gas should retain their pressure for a longer time. On this basis the rare gas, krypton, should be ideal for the purpose.

Tennis balls which had lost their resiliency because of age or which were dead because they were made of reclaimed rubber responded very favorably to the pressure treatment. Twenty-five pounds gauge pressure was found more suitable for the tennis balls than the forty pounds pressure used in the handballs. However, tennis balls which have been used enough so that the fuzz is worn off are not worth the trouble necessary to restore their liveliness.

HOSMER W. STONE and EUGENE L. COLICHMAN
University of California at Los Angeles
Los Angeles 24, California

It May Interest You to Know---

MISS BESS EXTON, Health Consultant in the Washington office of the Association, was in the field the week of September 6. On Tuesday, September 7, she spoke at the Old Main High School Auditorium, Sunbury, Pa., on the topic, "Yardsticks of Health Education in Wartime." On Wednesday, September 8, she met with school board members in regard to the employment of a health educator, and on Thursday, September 9, she was in Philadelphia conferring with members of the Pennsylvania Tuberculosis Association and other agencies.

* * *

ON Friday, October 1, Bucknell University, Lewisburg, Pa., held a conference on education in the auditorium of the Beaver Memorial Methodist Church. The general theme was "Latin American Education."

* * *

EDUCATION for "Victory" will be the general theme for the twenty-third annual observance of American Education Week, November 7-13, 1943. The Kindergarten-Primary, Elementary, Junior High School, and Senior High School manuals are available as aids in promoting American Education Week for 15c a copy with discounts on quantities. The National Education Association has again developed a movie trailer showing what the schools are doing to win the war and prepare for the peace. This film may be ordered for $7.50 a copy from the National Education Association, 1201 Sixteenth Street, NW., Washington 6, D. C. You can help by doing the following three things in connection with your observance of American Education Week. Send to NEA Headquarters a brief account of your observance, photos of activities in connection with your observance, and a report of the number of parents and citizens who yisit your schools during the observance.

* * *

THE American Humane Education Society announces its new annual contest for the most outstanding contribution to humane education. Each year the Society will award a gold key and $200.00 in cash or War Bonds. Entries may include projects on a humane theme, humane plays or stories, original methods of teaching humane education, or theses on humane education. This year's contest closes April 30, 1944. All those wishing to enter are urged to write to the National Humane Key Committee, 180 Longwood Avenue, Boston 15, Mass., for further information.

* * *

THE Navy announces that a new seaboot has been developed by the United States Rubber Company. It provides warmth and waterproof protection and will help protect men on watch on slippery decks of submarines.

* * *

NATIONAL Hearing Week will be observed October 24-30 throughout the United States and Canada, sponsored by the American Society for the Hard of Hearing, Washington, D. C., and its 121 chapters. The purpose of the week is to emphasize the value of hearing and the means of conserving it.

* * *

PURDUE University's new Industrial Recreation Section announces its first "Industrial Recreation Clinic" for October 25-30. Dr. Floyd R. Eastwood, Professor of Industrial Recreation, who heads the new section will direct the clinic which will offer training in leadership, organization, activities, finance, and other techniques that promote successful programs.

THE National Association for Nursery Education will hold its tenth Biennial Meeting in Boston, Mass., October 22-25, with headquarters at the Hotel Statler. This will be a work study conference on "The Community Serves the Child in War and Peace."

Dental Fitness

(Continued from Page 412)

graduation. Why *seniors,* and why *before graduation?* Because, in the first place, the majority of these 17-, 18-, and 19-year-old youths will walk straight from high school into the Army or Navy, the girls into various auxiliary services or home-front war work; secondly, because the achievement of dental fitness is obviously a duty that each individual owes to himself and to his country. It is not something that can conscientiously be put off until it must be taken care of by the already overworked Army or Navy dentists.

The High School Victory Corps is an unprecedented stimulus for high school students to obtain needed dental care. The Victory Corps emphasizes physical fitness, and the physical fitness program begins with the correction of remediable defects. All students are eager to do all they can for victory. Teachers trained in the psychology of adolescence should encounter no great difficulty in promoting the ideal of physical fitness by convincing students that this aspect of the program is just as much a patriotic duty as collecting scrap, working in a victory garden, or aiding the Red Cross or the U. S. O.

Because of the present serious shortage of physical education teachers, some aspects of the physical fitness program are difficult or impossible for understaffed high schools to carry out. But no school needs special equipment or specially trained instructors in order to promote the dental health phase of the program.

Complete dental corrections for every high school senior before graduation is an aim that can be achieved if everyone concerned will do his part. Dentists are working harder and longer at present than ever before, because so many members of their profession are in the services. The dentists, however, are well aware that high school seniors who will graduate next spring need "dental prehabilitation." Most civilian dentists are willing to place high school seniors ahead of other persons in making appointments, because the dentists realize how important to the national welfare is the dental health of young people who will soon become a part of the war machine. Educational administrators can greatly ease the dentists' burden by allowing students, particularly seniors, to make appointments for school hours. This permission will also come as a boon to many students who work after school.

THE fact that many students have part-time employment simplifies one aspect of the dental health problem that was previously a "head-ache" in some

communities—that is, the financial angle. Few high school students now have any difficulty in finding jobs. They can easily earn the money to pay for their own dental treatments.

We may sum up briefly, then, the responsibilities confronting each person concerned with the promotion of dental fitness for high school seniors:

Teachers have the fundamental task of presenting dental health needs to students so effectively that the students will be eager to obtain needed dental corrections.

Administrators can make things easier for both students and dentists by allowing students to make dental appointments during school hours if necessary.

Parents can help by insisting that their high school youngsters obtain dental care, and by either providing the money for such care or encouraging the young people to earn it.

Students can do their part by going promptly and willingly to the dentist and continuing their visits as long and as often as the dentist thinks necessary.

Dentists, the key men of the whole program, can make it practical and successful by granting priority on their waiting lists to high school seniors, especially those expecting to join the armed forces in the near future. »«

Couple Activities

(Continued from Page 431)

is highly selective; many more can be found in the books mentioned.

Classification

Combat and Wrestling Stunts.—Hand-tug of war with variations as one-hand tug of war, one-foot hopping tug of war, and backward tug of war; head rush with variations as shoulder shove, back-to-back shove, side shove; thunder clap; one-hand wrestle; double-hand wrestle; wrestler-hold wrestle; Indian wrestle; club pull (poison); bear fight; rooster fight; island fight; cane tussle; stick twister; cane wrestle.

Companion Mat Stunts.—Leap frog (men jumping alternately); double spring seat; mount to seat on shoulders; mount to stand on shoulders; two or three man thigh stand (Planchette); hand stand to seat on shoulders; wheelbarrow; caterpillar walk; camel walk; elephant walk; double sideward roll; handspring from knees; waist-hang whirl; shoulder throw backwards.

Resistive Exercises.—Face to face with two-hand push from chest; one- or two-arm pull; arm spread and close (moving arms inward and outward); front to rear (both men facing same direction) arm bend; arm push down; arm raise and lower sideward.

Supine Position.—One man lying face upward; knee bend and straighten; knee spread and close; ankle bend and straighten; leg spread and close.

Human Apparatus Exercises.—Buck exercises; straddle vault; squat vault; scissor vault; head spring; dive and roll. Parallel bar exercises: hip pull up; arm bending (chinning) in hang lying; support; turn over from support; chest stand; knee hang.

Rope skipping.—Men face to face, or side by side, hopping, skipping, or jumping in or from place.

Couple Races.—Also may be used as relay races; grasping one hand or locking one elbow; grasping two hands or locking both elbows, back to back; tandem (hands on shoulders or hips of man in front); three-legged race; centipede, elephant, camel, horse and rider; two men riding stick.

Boxing Exercises.—Chiefly as instruction with or without gloves; leads, parries, counters, meets, whirls, footwork as advance, retreat, sidestep.

Carries.—Arm carry; sack-of-meal carry; horseback carry; fireman's carry; standing carry or assist. Two-man carries as standing carry or assist; two-man tandem or chair carry, with or without chair; three-man horizontal carry. »«

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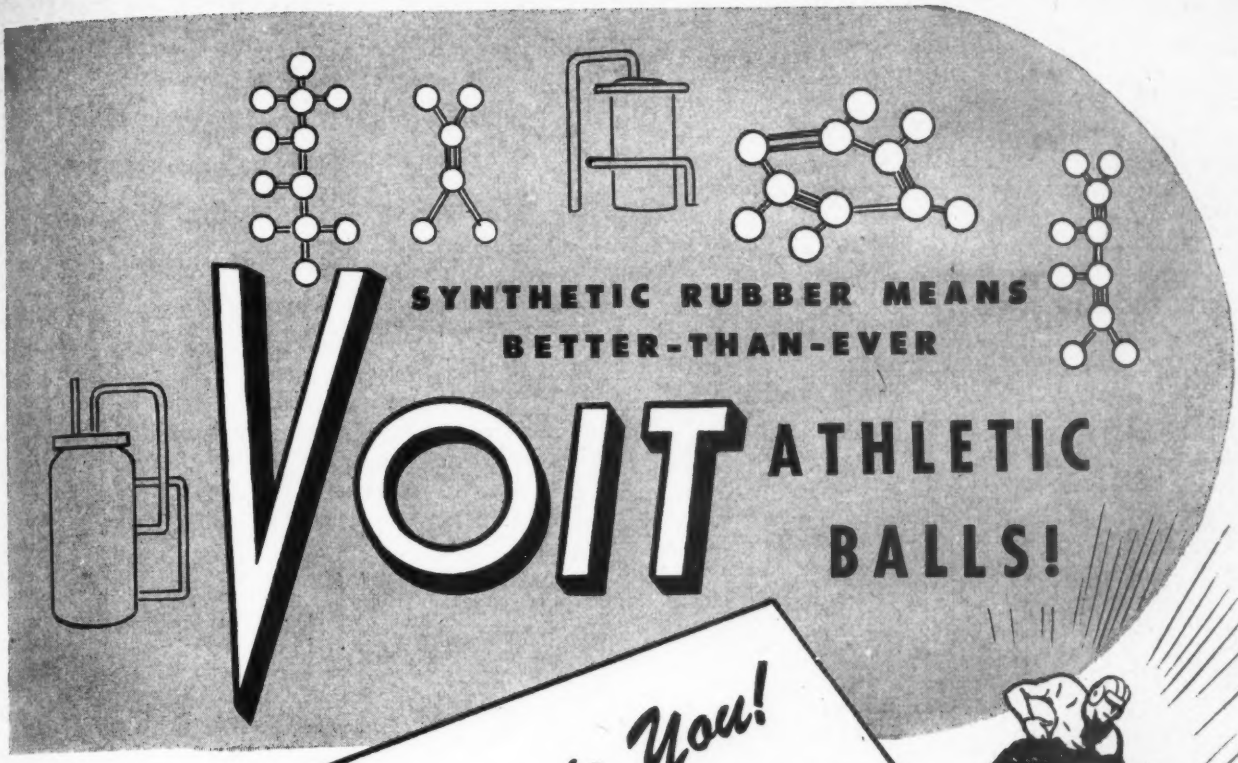
Youth and the Future

(Continued from Page 407)

up leaving youths to the temptations of the world. Many have fallen into the path of crime, not from any desire on their part but from a lack of parental and social supervision. If we do not attack the problem now, America will face an era of hardened criminals. The democracy we are now sacrificing lives to preserve will be dealt a telling blow. The home, the church, and the school must be even more closely coordinated to meet this problem. Never before were the tasks so important nor the opportunities so great for the remedying of such a grave situation.

Lack of proper home training has been found to be the cause for the failure of many young boys and girls. The greatest achievement any man or woman can make is to succeed in becoming a good parent. This is a tremendous task the duties of which cannot be forsaken for a single moment. If in the shadow of life one can pause and honestly state, "I have been a good parent," he has then contributed to future generations an endowment which all the ravages of time cannot efface.

THE life of every boy and girl demands individual attention from infancy until he reaches the age of



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mature judgment. This attention can best be given through the parents in a religious home. Too often in adult life there is a tendency to overlook the influences which our own homes have had upon the formation of our great nation. The home is where we receive our primary training and instruction; there the first restraints are placed on our conduct and we learn to distinguish between right and wrong. The child looks to the father and mother not only as his teachers and guardians but also as his guiding counselors. If the parent does not fulfill this duty or if the home is torn by the disintegrating factors of war, the child must turn to others. Too often the immature adolescent follows the tutelage of individuals of low morals. I have seen many instances where youths have adopted criminals as their idols solely because they knew no other course to take.

Those who are left at home have greater responsibilities to see that the younger brothers and sisters are guided and counseled in the right way of life. The task of those who remain becomes greater and there must be renewed effort upon the part of parents in properly supervising their children.

Religion in the home is necessary for good living. The church is the cornerstone of every community. Its guiding influence directs the thought and actions of all with whom it comes in contact. In the church the youngster learns more of those truths which he first realized at the knee of his mother or father. There he receives the teachings which will regulate his conduct through life. In the quest for material wealth there has been a tendency to forget the church and religion.

The school has an essential part to play in affording to all young people a proper insight into formalized education and the directing of overabundant energies in proper channels. At school the young person learns more of the fundamental principle which he first realized in the home—cooperation and ability to work with others. If the school does not provide these factors or if theorists have undermined its fundamental duties and have instituted teachings which have tended to revolutionize the thought of the child and tend to turn him away from the home and church, then those schools have failed in their duty. It is the duty of every individual in the United States to see that the young people of his community are receiving the proper teaching in those things which are so necessary to equip them for the battle of life.

THE problem of child delinquency can be met before it presents an insurmountable obstacle. Primarily this duty is upon the individual. Individually and collectively it falls upon the home, the church, and the school. These three must work together and furnish to the young people, rich or poor, all of the benefits and the teachings of good, wholesome life.

The school serves our teen-age people long hours of each day. Extracurricular activities at school, youth organizations, and recreational facilities serve to fill the after-school idle hours of the young people and during vacations. Each town, school, and all patriotic citizens should lend every effort now to afford the young citizens of the community wholesome guidance through better recreational opportunities, closer and friendlier guidance, and more understanding companionship.

Performance Levels

(Continued from Page 426)

ly contribute to this total complex called "fitness." It is believed, however, that activities which will contribute to the development of the qualities measured by the tests will also have a desirable effect on the several physiologic systems *for girls who are organically sound.* To the extent to which this statement is true, then, improvement in the test scores may be considered to indicate improvement in physiologic functioning.

The Research Committee wishes to emphasize the fact that the degree of "fitness" attainable through exercise or any other means varies with the individual. It is not desirable to urge all girls to try to reach some one set standard of performance in *any* type of activity, no matter how beneficial that activity may be. Each girl has her own individual abilities and constitution which set the ceilings for her own performances. It is part of the educational process for each girl to recognize the existence of her own ceilings as she constantly strives to improve her performance within her own limitations.

For these reasons the Research Committee believes that the most worth-while contribution these Performance Levels can make to the "fitness" of high school girls is, first, to help them evaluate their own performances, and, second, to provide them with a measuring stick against which to evaluate their own improvement. If these Performance Levels motivate the high school girls of this country to try to improve their performance in activities requiring skill, coordination, strength, agility, and endurance, then they will have served the purpose of helping to improve the general "fitness" of those girls for wartime and peacetime service.

6. *Are the present Performance Levels fixed and unalterable standards?* No. They are tentative standards only. They will be validated and modified by the experience of the high school teachers and the high school girls who use them. It is the hope of the Research Committee that each teacher who uses the Levels during the coming school year will make copies of her records and send them to the Chairman of the Committee.* From these records it will be possible to modify the Levels and adapt them to fit the experience of those using them. From these records also, it will be possible to determine the amount of improvement which can be expected in one semester from individuals who start at the various levels of the scale for each type of activity. It is the sincere hope of the

* Blanks for this purpose may be secured from Dr. Eleanor Metheny, University of Southern California, Los Angeles, California.

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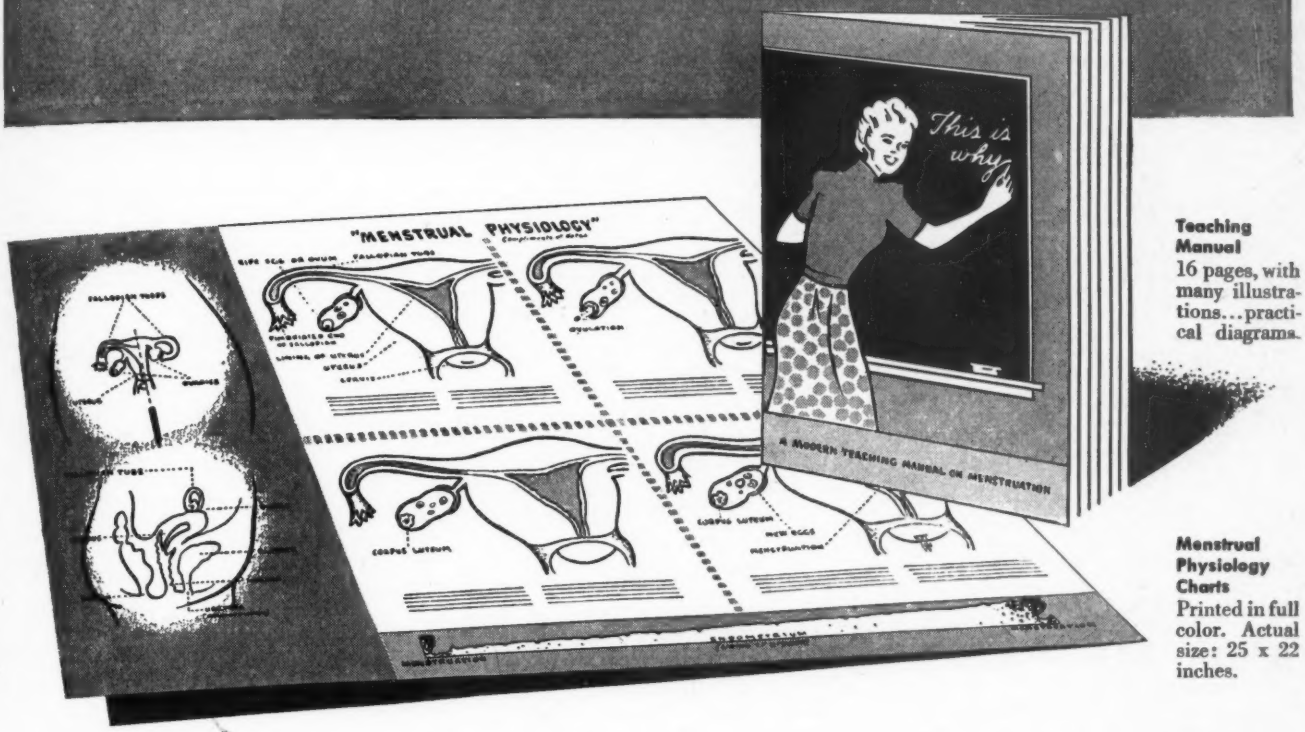

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Committee that the teachers who use the Performance Levels will be sufficiently interested to provide this information which will make it possible to improve the validity and usefulness of the Physical Performance Levels for high school girls.

Directions for Giving Tests

1. Administer the tests only to girls who have been approved for strenuous exercise by the health examining agency in the school. Girls restricted in activity for any reason (heart, post-operative, hernia, recent illness, structural defects) should not be permitted to take the tests.

2. Do not permit any girl to take the tests during her menstrual period.

3. Tests should be explained, demonstrated, and practiced during at least one class period prior to the testing. During the practice period, stress form rather than maximum performance.

4. If all tests are to be given in two class periods, the following grouping is recommended:

First day:
- * Push-ups
- Standing broad jump
- * Sit-ups
- * 10-sec. squat thrust

Second day:
- Pull-ups (or straddle pull-up)
- Potato race
- Basketball throw for distance
- * 30-sec. squat thrust

General Body Coordination

1. Standing Broad Jump: Use outdoor jumping pit if available. If jumping indoors, use mats laid end to end. Time will be saved in outdoor jumping if numbered markers are set up at intervals of one foot along the side of the pit, and in indoor jumping, if parallel lines are marked across mats at an interval of one foot, numbering them 0, 1, 2, etc.

The jumper stands with toes on 0 line and jumps forward from both feet as far as possible to a landing on both feet. In preparing to jump, the girl may rock back and forth but may not lift either foot clear of the ground. Both jump and landing must be made with both feet.

Distance is measured from 0 line to back of heel print nearest starting line (or to print made by buttocks if girl loses balance and sits back). Three trials are given and the best is recorded. Score: Length of jump in feet and inches.

2. Basketball Throw: Mark parallel lines on the floor at intervals of five feet. Number the lines 0, 5, 10, 15, etc. It may save time to have the zones numbered from both ends of the floor so the ball may be thrown alternately from either end and so avoid the necessity of returning the ball so far between throws.

The thrower stands one step behind the 0 line. She throws the ball (an official basketball, properly inflated) as far as possible, using any type of one- or two-hand throw (preferably a one-hand over-arm, side-arm, or hook to get distance). She may take one step forward as she throws. Both feet must remain behind the starting line until the ball has left her hands.

Two observers should be stationed at about the distance the girl has thrown in practice. As the ball strikes the floor, the observers move quickly to stand on the spot where the ball hit and to note in which zone it landed and whether it is one foot, two feet, three feet, or four feet past the zone line. Three trials are given and the best is recorded. Score: Length of the throw in feet the ball traveled in the air.

3. Potato Race: Draw two lines on the floor thirty feet apart. Two small blocks of wood (approximately two inches by two inches by four inches) are placed just beyond the second line.

The runner stands behind the first line. On the signal, "Are you ready?" (pause) "Go!", she runs to the second line, picks up one block of wood, runs back to the first line and places (*not throws*) the block behind the line; she then runs back to the second line, picks up the second block of wood and runs back to the first line, finishing as she crosses the line with the block in her hand. Two trials are given and the best one is recorded. Time will be saved by having girls start alternately from the first and second lines as this makes it unnecessary to move the blocks between runners. Score: Time in seconds and fifths from the starting signal until she crosses the line on her second round trip.

Arm- and Shoulder-Girdle Strength

1. Push-ups: Lie face down on the floor with body straight and legs together. Bend the knees to a right angle and place the hands on the floor *at shoulder level.* Push up to a position in which the arms are straight and the weight is supported entirely on the hands and knees. The body must be in a straight line from head to knees; do not bend hips or round or hollow the back. Next, bend the arms until the chest touches the floor. *Do not permit legs* or *waist* to *touch.* The weight continues to be supported by the arms and knees. Repeat as many times as possible. Score: The number of times body is pushed up. (See illustration on page 16, *Journal of Health and Physical Education,* January, 1943.)

2. Pull-ups: Place horizontal bar or one arm of parallel bars or any securely supported rod three feet six inches from the floor. Grasp bar with both hands, palms upward. Bend arms and move close to bar; at the same time bend knees and walk feet under the bar until the body is in a straight line from knees to shoulders. Extend arms fully, bend the knees to a right angle and keep the feet on the floor. The body should now be in a straight line from shoulder to knees and parallel to the floor. The weight is supported by the hands and feet. From this starting position pull up with arms until chest touches bar. The body should move from the knees. Do not bend at the hips or round or hollow the back. Return to extended arm position. Repeat as many times as possible. Score: The number of times the body is pulled up to chest-bar position. (See illustration page 17, *Journal of Health and Physical Education,* January, 1943.) If it is not possible to secure a bar, the Straddle Pull-up may be substituted for the Pull-up.

Alternate 2. Straddle Pull-up: Partner formation, with partners of approximately the same height. Girl to be tested lies on her back with body and legs straight and arms upstretched. Partner stands astride subject, facing subject, and places feet at about the level of the subject's waist. Partner stands erect with arms hanging down. Subject and partner hook or grasp fingers with subject's palms toward her face. Subject keeps heels on the floor and pulls up with arms until chest contacts firmly insides of partner's thighs. The body should be straight from heels to shoulders. Return to the starting position. Repeat as many times as possible. This exercise should be continuous. The subject should not relax and rest on the floor between pull-ups. Score: The number of times the body is pulled up to chest-thigh position. (See illustration page 17, *Journal of Health and Physical Education,* January, 1943.)

Abdominal Strength

Sit-ups: Lie on back, feet separated two feet to two and one-half feet, legs straight. Place hands on back of neck with finger tips touching; rest elbows on the floor. A partner places hands on ankles and holds heels in contact with the floor during the exercise. Sit up to vertical position, turn trunk to left and touch right elbow to left knee. The finger tips of both hands must remain in contact behind the neck throughout the exercise but the back may be rounded and the head and elbows brought forward in sitting up and in touching the knee. Both knees must be kept straight at all times. Return to lying position, elbows on the floor. Then sit up,

*** Partner formation. One girl takes tests while partner counts number of exercises completed. Then they exchange positions, second girl taking test and first girl counting.**

touching left elbow to right knee. Repeat, alternating sides. Score: Number of times the girl raises herself from a lying to a sitting position.

Endurance

Squat-thrust: Beginning from standing position, (1) take deep knee bend placing hands on floor in front of feet in squat-rest position; (2) jump legs backward to front leaning rest position, that is, with the body resting on hands and toes. The back should not be allowed to sag or hollow, nor should the hips be struck up above the line of the back; (3) return to squat-rest position; (4) stand erect, head up. Repeat as many times as possible in the time allowed. Score: Number of complete exercises plus extra quarter movements made in time limit. This exercise is used two different times, the first for 10 seconds and the second for 30 seconds. In the latter test it will be helpful to the girls if the teacher indicates the end of each 10-second period. »«

TENTATIVE PERFORMANCE LEVELS FOR HIGH SCHOOL GIRLS

Scale Score	*Standing Broad Jump*	*Basket-Ball Throw*	*Potato Race*	*Pull-ups*	*Push-ups*	*Sit-ups*	*10-sec. Squat Thrust*	*30-sec. Squat Thrust*
100	7-8			53	76	61		
99		77			75	60		22¾
98	7-7		7.4	52	74		9¼	
97		76		51	73	59		22½
96	7-6	75			72	58		22¼
95			7.6	50	71	57		22
94	7-5	74		49	70	56	9	
93					69			21¾
92	7-4	73		48	68	55		21½
91		72	7.8	47	67	54	8¾	
90	7-3				66	53		21¼
89		71		46	65	52		21
88	7-2	70	8.0	45				
87					64	51	8½	20¾
86	7-1	69		44	63	50		20½
85		68	8.2	43	62	49		
84	7-0				61		8¼	20¼
83		67		42	60	48		20
82	6-11			41	59	47		
81		66	8.4		58	46		19¾
80	6-10	65		40	57	45	8	19½
79				39	56			
78	6-9	64	8.6		55	44		19¼
77		63		38	54	43	7¾	19
76	6-8			37	53	42		
75		62	8.8		52	41		18¾
74	6-7			36				18½
73		61		35	51	40	7½	
72	6-6	60			50	39		18¼
71			9.0	34	49	38		18
70	6-5	59			48	37		
69		58		33	47		7¼	17¾
68	6-4		9.2	32	46	36		17½
67		57			45	35		17¼
66	6-3	56		31	44	34	7	
65			9.4	30	43			17
64	6-2	55			42	33		16¾
63				29	41	32		
62	6-1	54		28	40	31	6¾	16½
61		53	9.6		39	30		16¼
60	6-0			27				
59		52		26	38	29	6½	16
58	5-11	51	9.8		37	28		15¾
57				25	36	27		
56	5-10	50		24	35	26		15½
55			10.0		34		6¼	15¼
54	5-9	49		23	33	25		
53		48		22	32	24		15
52	5-8				31	23	6	14¾
51		47	10.2	21	30	22		
50	5-7	46		20	29			14½
49					28	21		14¼
48	5-6	45	10.4	19	27	20	5¾	

PRACTICAL HELPS

when called upon to advise girl students

At times, a student-teacher discussion about athletic activities during the menstrual period may lead to a deeper discussion of menstruation itself. The teacher, then, naturally will desire to clarify the purpose and processes of this physiological function as well as advise about its care.

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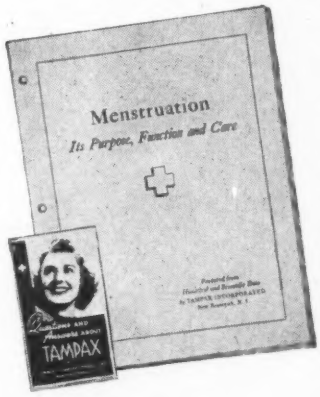

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Scale Score	Standing Broad Jump	Basket-Ball Throw	Potato Race	Pull-ups	Push-ups	Sit-ups	10-sec. Squat Thrust	30-sec. Squat Thrust
47		44		18	26	19		14
46	5-5				25	18		13¾
45		43	10.6	17				
44	5-4			16	24	17	5½	13½
43		42			23	16		13¼
42	5-3	41		15	22	15		13
41			10.8	14	21		5¼	
40	5-2	40			20	14		12¾
39				13	19	13		12½
38	5-1	39	11.0	12	18	12		
37		38			17	11	5	12¼
36	5-0			11	16			12
35		37	11.2	10	15	10		
34	4-11	36			14	9	4¾	11¾
33				9	13	8		11½
32	4-10	35		8	12	7		
31		34	11.4					11¼
30	4-9			7	11	6	4½	11
29		33		6	10	5		
28	4-8		11.6		9	4		10¾
27		32		5	8	3	4¼	10½
26	4-7	31		4	7			
25			11.8		6	2		10¼
24	4-6	30		3	5	1		10
23		29			4		4	
22	4-5			2	3			9¾
21		28	12.0	1	2			9½
20	4-4	27			1			
19							3¾	9¼
18	4-3	26	12.2					9
17								8¾
16	4-2	25					3½	
15		24	12.4					8½
14	4-1							8¼
13		23						
12	4-0	22					3¼	8
11			12.6					7¾
10	3-11	21						
9							3	7½
8	3-10	20	12.8					7¼
7		19						
6	3-9							7
5		18	13.0				2¾	6¾
4	3-8	17						
3								6½
2	3-7	16					2½	6¼
1			13.2					6

An Objective Test

(Continued from Page 419)

with a shortened rein. In no way can the personal preference of a fair judge influence the grading. Only under General Horsemanship is the judge asked for an opinion and there, we feel, is the place to award the rider who obeys her commands more quickly, or the rider who quiets a nervous horse, or breaks a green horse easily into his leads.

Perhaps the most gratifying compliment paid to our score sheet is the unanimous approval of the riders. This rider was not "thought" better. She proved herself good. Our new competitor might not have equalled the highest score but it is down in black and white that she knows her diagonals. She has an incentive for raising her score the next time instead of having a let-down, third-rate feeling. Instead of the question, "Who won?" students invariably ask, "What was your score?" Judges and instructors prefer this method. It has been the teachers' practice to review score sheets with the team, thus driving home points of constructive criticism at a time when it will do the most good. We ask our judges to offer criticism to each individual just before she leaves the ring; this is a great service to the contestants. As an aid to teaching it is invaluable. It is concrete. Well you may say, "Here is your problem. How well you do at the meet depends on your concentration and practice here in class." You will have better students. I was very surprised at the request of my beginners to try the figure eight at the trot. They had had but one session on diagonals, and yet those students who had attended the riding meet were already masters of detecting and changing diagonals.

Is such a scoring system dull for spectators? Our fear was that it might be slow moving for the average audience, so we outlined specific information and passed these "programs" to our audience. We had a crowd of over four hundred sit through a four-hour show, applauding technical points that we were afraid would bore them!

We feel that a riding contest that does not have a definite carry-over is of no value. Measured by the interest of participants, inspiration for beginning classes, and the constructiveness of the criticism, the objective scoring sheet has proved valuable.

Health Education

(Continued from Page 430)

munity service on completion of their school work. Already many of them are in some form of community work as a wartime contribution. A student who is generally fit will be ready for most future services. However, for some services additional health preparation is needed because of the health and safety problems involved. The manual suggests health preparation needed for four war-related services, namely, home care of the sick, school feeding, school and community sanitation, and clinic service. Appropriate activities are outlined for students who are in training for these services.

Administration of the Health Education Program

Administrative provisions necessary to allow each student to make progress toward the six health objectives and to receive health preparation for war-related services are:

1. *Fixing responsibility.*—In each school one person should be given the responsibility for coordinating all school health education activities and for relating them to other health activities in the community. The responsible person may be the school medical adviser or nurse, or a well-qualified teacher, such as the teacher of physical education, home economics, or science. Essential to the success of the program is the active support of everyone concerned including teachers of physical education, health, science, home economics, and in addition, counselors, administrators, school medical adviser, school nurse, cafeteria manager, custodian, stu-

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dents, parents, representatives of local medical and dental associations, and of public health departments, and many others whose special interests lead them to take an active part in the health improvement of youth. This support may be secured through committee organization or otherwise.

2. *Providing time and opportunity for health instruction.*—Opportunity for health instruction may be provided in (a) special health courses, (b) integrated courses, and (c) units in other courses in the curriculum. Joint planning by members of the school staff will assure that adequate instruction in all important areas of health is available to all students in line with their needs and interests.

Students during the ninth and tenth grades need orientation in the high school health program. They need assistance in analyzing the findings of their own health examinations and in working out plans for personal health improvement. Students during the eleventh and twelfth years need, in addition, preparation for meeting health and safety problems associated with war-related services; and for becoming intelligent citizens ready and capable of working for individual, family, and community health improvement.

Five periods per week of direct health teaching, or the equivalent, for at least one semester during the ninth or tenth grade will be necessary in order to meet the needs of entering students. Five periods per week for at least one semester during the eleventh or twelfth grade, or the equivalent, will also be needed for ample preparation of students who are more nearly ready to enter adult services. The less frequent but more concentrated periods for health instruction, as for example, twice during a four-year program, is gaining wide acceptance as being a sounder and more effective procedure than the plan of weekly or biweekly instructional periods given throughout the four years.

Many basic and significant contributions to health education are best made in the context of courses other than health. These possibilities should be fully explored.

3. *Finding health needs and problems and providing follow-up procedures.*—Medical examinations, teachers' observations, and special tests are useful tools for discovering health needs. It is important always, but particularly now with depleted medical and nursing services, that machinery be set up for instruction of teachers on methods of observation and for the actual carrying out of observation procedures. Individual cumulative health records and histories are valuable aids for follow-up procedures which include medical care, provision of health necessities, such as food and clothing, changes in routines, and program adjustments. Special attention should now be given to students who are attempting some form of work in out-of-school hours to make certain that this work is not proving detrimental to their health. All phases of this service program should be made a part of the educational experience of students.

4. *Providing a school environment conducive to health.*—Under wartime conditions, crowded school

shops make necessary more than the usual vigilance in maintaining safeguards there. More time devoted to physical education makes it essential to bring up to date health and safety policies regarding provision of play equipment, showers, and lockers. General sanitation and cleanliness will need special attention because of depleted custodial personnel. The school lunch is an essential part of the total health program. Maintenance and improvement of environmental conditions may be made valuable educational experiences for students.

5. *Training of personnel.*—The best trained persons on each faculty should devote their time to the problem of health of young people. Many schools will not have specially prepared health educators available. Administrators should see that those chosen for the task secure additional in-service preparation by such means as consultation with members of the faculty with better training in particular fields than their own, working with supervisors in health and specialized fields and with trained community health workers, reading, and study through informal group meetings, extension courses, and in-service courses.

6. *Community relations.*—No activities of the school can be thought of as apart from those of home and community. Just as the school can make many contributions to the community health program, so too can community groups contribute much toward preserving and improving the health of high school students. Many suggestions to this end are contained in the manual.

In this critical period, an all-out effort is required to put the high schools of America on a wartime basis. Intensified programs of health education are an essential part of that effort. »«

U. S. Office of Education Committee on Wartime Health Education for High Schools

U. S. Navy:

Lt. Comdr. Alfred W. Eyer, Flight Surgeon, Medical Corps.

U. S. Army:

R. Will Burnett, Consultant in Science Education, Civilian Pre-Induction Training Branch.

U. S. Public Health Service:

E. R. Coffey, M.D., Assistant Surgeon General.

Children's Bureau:

Katherine Bain, M.D., Director of the Division of Research in Child Development.

U. S. Office of Education:

Vivian V. Drenckhahn, Senior Specialist in Nutrition.

Ruth E. Grout, Consultant in Health Education and Chairman of the Committee.

Frank W. Lathrop, Agricultural Education Service.

Berenice Mallory, Home Economics Education.

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Fitness and the W.A.C.

(Continued from Page 411)

Body Conditioning

To the above ends the following program has been devised. It is simple but effective. Each daily program is basic and specialist training consists of the following:

1. *Posture.*—Posture is emphasized throughout everything the woman does in the Army. She is constantly checked in drill, on the streets of the post, on duty and off duty. In physical training she is instructed in the more common postures, such as standing, sitting, walking, and running. In addition, she is checked constantly on her posture in the performance of all exercises.

2. *Cadence Exercises.*—A cadence series is a group of six exercises performed to a 4/4 cadence or rhythm. They are performed without stop between exercises. The series are all built on the same plan: an exercise for arm swinging, arm flinging, the head, the shoulders, the trunk, and the legs. The teacher who learns one series has very little trouble learning the other three series because they are patterned so closely upon each other. All joint movements are covered by the time a woman has completed all four series. They profess only to warming up the body for more vigorous exercise, to developing some flexibility and control of body parts, and to loosening up tense muscles.

3. *Strength Progressions.*—These series of exercises are the meat of the program. Four areas of the body were chosen for this development of strength. They are: arm and shoulder, upper back and neck, abdomen, legs.

Within each of these areas a series of exercises has been developed. The first exercise of each series or progression is a simple exercise that serves the purpose of a starting exercise because it is possible for practically anyone to do. Its great value lies in the fact that it locates for the woman the muscles which the progression is trying to develop. From this point the exercises become increasingly difficult. It is felt that, for example, if a woman learns to do well exercise three in the series, she will achieve exercise four with some practise. Continued success is the key to continuous effort. The system of progression within these exercises cuts down the danger of over-exertion which

we must consider because of the age range of 20-50. It also considers that the women come to us in all stages of fitness, albeit medically sound.

One of the criteria which was set up in the selection of these exercises was that they be of a challenging nature. As far as possible each exercise is definitely a success or failure on the part of the participant. Relatively inexperienced teachers can grasp this. It helps them in their corrections. It allows for competition between members and groups of members. It is in keeping with the competitive psychology of Americans.

When a woman reaches the last exercise in each series, she is deemed to have achieved relative success. Each "last exercise" can be done an increasing number of times with the development of strength. It is constantly brought to the woman's attention that it is not the ability to do these exercises that is important but what they indicate as to her physical condition. These last four exercises are:

Arm and Shoulder Strength—Full Dip.—The final exercise in this progression is a full dip or push-up. After mastering the full dip the emphasis is on developing the ability to do a greater successive number.

Upper Back and Neck Strength—Wing Lifts.—This is not as difficult an exercise comparatively as the other final exercises, but a person is capable of improving greatly in the number of times it is possible to perform. This exercise counter-balances the strength developed in the anterior shoulder region and aids in acquiring a natural correct posture of the upper torso.

Abdominal Strength — Sit-ups with bent knees. — There is progression within this exercise, depending upon the position of the arms and their use as a propelling force. This area of the body is one where strength will go far toward promoting a good appearance, cutting down on the number of absences due to dysmenorrhea, and aiding in preventing constipation.

Leg Strength—Running.—Running was chosen because it also involves the factor of cardio-respiratory endurance. The average woman is woefully lacking in her ability to maintain this type of activity over any significant period of time.

4. *Foot Exercises.*—After finishing with the very vigorous leg exercise, an active rest period occurs during which time a foot exercise is performed. Emphasis is placed upon correct walking as the best exercise for the feet.

5. *Body Mechanics of Everyday and Military Activities.*—The WAC considers the practical application of physical training to everyday life very important. Such activities as pushing, pulling, lifting, carrying, etc. are dealt with from the point of view of efficiency on the job and the saving of energy for the individual. Many injuries may also be prevented by this instruction. This type of practical application appeals to the women very much.

6. *Agility, Coordination, and Balance Activities.*—This category of exercise provides a medium for locomotive exercises which by the intensive nature of the rest of the program is not strong up to this point. It affords opportunity for the development of reaction to outside stimulus. Games and relays are present from this point of view. On the whole, women rather enjoy a throwback to adolescent activity, unless it is presented from the angle that, "Now we are going to have fun, girls."

Summary

The preceding discussion covers a daily lesson in basic and specialist training. Summed up, it means that the instructor presents a Cadence Series which takes about 3 minutes once it is learned. Four strength exercises are next presented. Here it is emphasized that the exercise to be taught always depends on the known ability of the group. One foot exercise is followed by explanation and practise of a body mechanics activity, which in turn is followed by a relay, stunt, or game. During all of this, attention is paid to the women's posture. This procedure takes approximately 40 minutes.

When a woman has finished basic training—approximately five weeks—she may or may not have completed the "strength progression" part of the program. Whether she goes directly to field job or to a specialist school, she begins where she left off in basic training. By this procedure, there should be no woman who does not eventually have the strength to do the four final exercises. At this point she shifts to the "Daily Exercise Series" for maintenance of this developed condition and for further progress. The Daily Exercise Series is composed of a Cadence Series and the four final exercises in the strength progressions. The woman is introduced to many more informal sports and recreation activities. She is given instruction if she is weak in the skills of any particular sport she would like to participate in. To sum up, the maintenance program consists of the Daily Exercise Series and sports and games in her off-duty hours.

Several of the elements of the program do duty in more than one sphere. As has already been mentioned, the last exercise in each strength progression is used in the Daily Exercise Series. These same exercises, supplemented by others, form the basis for the self-testing program. We hope in the near future to be able to establish standards for these activities.

The Cadence Series may be used for release of muscle tension; for example, by typists or telephone operators, who work long hours in one position. They may be used by those doing manual labor, to take the kinks out of their muscles after a heavy job. They are used in the Daily Exercise Series as warmer-uppers. They are used before practising Unarmed Self-Defense for the same reason. This serving of several purposes means that each woman has less to learn and is more sure of what she does know. There is more time to instill a few basic principles into her mind. It is a slogan of the program that it is based on quality of exercise rather than quantity. With officers, it means better teaching. With enrolled personnel, it means more wholehearted acceptance and interest on

their part. They no longer feel the need for "spoon feeding" by an "exerciser."

No discussion of the program would be complete without saying that as many women as possible are taught "Functional Swimming." They may find it very essential at some time in their military life.

This is the essence of the physical training program, and some of the thoughts that were in the minds of the women who originated the program. Every member of the physical education group in the WAC realizes the great challenge and opportunity with which we are faced. We realize that thousands of women returning to civilian life at the end of this conflict are going to influence many scenes in civilian life. If these women return physically fit and with a realization of its benefits to them, it is possible that the whole feeling regarding physical fitness for women in this country might be changed. These women will have a telling influence on their families and friends. They will be the mothers who will have insight into fitness for their children. They will be the allies of the physical educator in the future. It is a vision that makes every physical educator in the WAC more alert and zealous than ever before. »«

The Teacher Shortage

(Continued from Page 418)

teachers. Extension courses, short courses, and field courses are some of the types which may suit the local need. When teachers live at great distances, the institution may find it advisable to offer correspondence courses.

Conferences.—There should be regular conference periods when the in-service trainees and the school principal or person delegated as physical education supervisor meet together to talk over the program and its problems of presentation. These conferences might well be held on a weekly basis, certainly no less frequently than once a month. If possible to make such arrangements, the trainees should have two or three conferences a year with a person trained in physical education procedures.

Faculty Discussion and Study.—The success of the physical education program is dependent upon the understanding and cooperation of the entire faculty of each school. It is suggested, therefore, that each secondary school principal discuss with his faculty the manual, *Physical Fitness Through Physical Education for the Victory Corps.* Demonstrations by students of the activities in the manual should accompany these discussions.

Demonstration Lessons.—Whenever services of a trained person are available, the trainees should be given demonstration lessons in the various activities of the program. In some localities there are men and women who are expert in these activities. These individuals may be willing to volunteer their services for brief periods as demonstrators.

The activities given in the manual on *Physical Fitness Through Physical Education for the Victory Corps* should be properly demonstrated. If teachers are interested and are physically able, demonstration should be accompanied by active participation. If teachers do not participate, then student leaders should be present at the demonstrations and should participate in them under the teacher's supervision.

Financial Aid for Emergency In-service Training of Teachers.—Traditionally, teachers themselves have borne the cost of professional training. Teachers trained in other fields are now being assigned to teach physical education. To be effective, they should receive special training in this field.

It is desirable that this cost be borne by public funds, preferably school funds. In many instances local laws and practices may not permit this. In such cases private funds should be sought by the state, county, city, or local school authority as the case may be to achieve necessary in-service training. The appeal should never be on a personal basis but rather in terms of the objectives to be attained. The individuals to be trained should not be expected to account for such training to the donors.

There are patriots who will train to teach; there are patriots who will provide the means; let the school authorities provide opportunities on the proper basis.

Using Student Leaders

Point of View.—The use of student leaders in physical education has long been accepted as sound educational practice. Proper use of student leaders has proved one practical way to increase the effectiveness of teaching during the emergency. It can also be one of the soundest methods of giving laboratory experience in democracy, not only during the emergency, but at any time. Thus first emphasis may be placed on helping overcome the teacher shortage for the immediate emergency but at the same time steps should be taken to make the leadership program as educationally productive as possible as it continues in use.

Organization.—The leaders should always work under the immediate direction of a faculty member. Such leaders should be carefully selected and trained for their work. The first function of a student leader is to increase the effectiveness of the teacher by taking over responsibilities of group handling and instruction. There may be a class leader or captain, squad leaders, and demonstration leaders in special activities. Some students have special facility in handling groups but may or may not be especially skilled in activities whereas other students may have outstanding ability in performance of certain types and should be the instructors for such activities. Gradation of responsibility may be desirable for effective class management.

Leaders should be given real status or prestige. They should not be errand boys or monitors. They should have certain privileges in return for their extra time and work. Every effort should be made to build pride in their work individually and as a group to develop ability, responsibility, and morale.

Selection.—The success or failure of the student leader program may depend upon the ability of the teacher and of the class to select students of proper qualifications and to use their abilities to best advantage.

The qualities needed by student leaders in physical education include:

1. Physical fitness.
2. Dynamic traits which induce desirable action in others.
3. The desire to be a leader in this field.
4. A likeable personality.
5. Self-confidence, initiative, and "drive."
6. Skill in physical education activities.
7. A constructive attitude.
8. Readily adjustable to new conditions.
9. A sense of humor.
10. Intelligently persistent.
11. Truly democratic in thought and action.
12. Demonstrated ability as a leader in student activities.

While all of these are desirable, all are rarely present in any one person. They can be developed but meanwhile certain phases of leadership may be carried out if the teacher supervises or directs wisely while building the broader program.

Selection of student leaders for service may be made: (1) by the teacher or faculty; (2) by the students; or (3) by a combination of the two. In any of these a careful study of essential qualifications should be made. Discussion with students regarding the qualities and responsibilities of leaders is an essential preliminary to the selection. The success of the student leadership program depends upon the understanding of principles of leadership and cooperation in carrying them out. The use of student leaders does not relieve the faculty members of their responsibility for the organization and operation of classes.

A continuous program should be used for developing potential leaders from the general class membership by a process of self-selection and a further program of training and development. Many of the qualities and skills of leadership are not inherent but can be developed. Every student should have full opportunity to develop these abilities.

Student leadership should not be a matter of imposed authority but rather a sharing of planning and responsibility for progress of the whole whereby those of recognized ability along certain lines are selected by the group as their representatives to carry out necessary duties. It is not a matter of leader and follower but a real sharing by all with a representative of the group chosen to unify or coordinate the work of the group as needed.

Training.—Teachers with little professional training in physical education will need the immediate help of a few intensively trained leaders who can assume, under direction, considerable responsibility for organizing and

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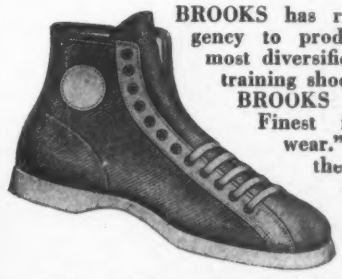

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conducting the class. For this purpose several students should be carefully selected in advance to take the in-service training described above.

State Program.—In each state this training program should use facilities and personnel of the colleges and universities and of recreational areas or other available training resources. Each school should arrange to send the designated leaders for the training period of a week or for three periods of two days each. They should be given school credit for this period and should have their expenses paid. When they return they may help train others.

In preparation for the training institutes two steps may be found helpful. These are: (1) the organization by the state department of education of a state committee on student leadership; this committee should complete specific and detailed plans for the promotion and operation of the training institute; and (2) conducting a laboratory or preliminary institute at the state university or some other suitable location for the training of faculty members who will have the responsibility for developing other training centers throughout the state. This institute should run for at least a week and should include high school student leaders and adults who will conduct the institutes at the state teachers colleges and other points throughout the state.

The Program for the Student Leaders' Institutes.—The programs that are planned for the institutes for student leaders should be described in detail as a guide to the persons who have the responsibility for their operation. These descriptions should state the following items concerning the institutes: (1) the purpose; (2) the period of time; (3) the daily program; (4) the organization of students for classes and other activities; (5) the content of the course; (6) the schedule of classes; and (7) the duties of faculty members.

Purpose.—To train student leaders to help carry on the wartime program of physical education.

The Daily Program.—The first daily session of the institute may well be held each morning at 9:00 o'clock with a flag ceremony or other patriotic feature. All squads should assemble together each morning for the opening ceremony.

Classes should be held from 9:00 A. M. to 12:00 noon and from 2 P. M. to 4:00 P. M. daily; and from 7:30 P. M. to 9:00 P. M. on Monday, Wednesday, and Friday evenings. The evening classes may well include group singing, square dancing, and other recreational activities.

Each squad should meet with its faculty adviser each afternoon, except Saturday, at 4:30. At these daily meetings the work of the day should be discussed and plans made for the next day. Each squad should keep a written record of its discussion. There should be a faculty meeting each day at 8:00 A. M. The squad leaders, all of whom are members of the Students Advisory Committee, should meet each day at 12:15 P. M. with the Director of Instruction.

Organization of Students for Classes and Other Activities.—The number of students who participate in each institute will vary but assuming a registration of 100 students, the group should be divided into twelve squads with an average membership of about eight students. Each squad should have a squad leader, an assistant squad leader, and a faculty adviser. The squads should be organized on Monday. Squad leaders may be permanent or rotating as seems best.

The squad leaders should constitute a Students Advisory Committee. This committee should meet with the Director of Instruction each day at 12:15 P. M. The purpose of this committee is to advise with the Director of Instruction and the faculty on institute matters of common interests. The committee should observe all the activities of the institute closely. At the time of the meetings the members of the committee may make suggestions concerning the program and operation of the institute. The faculty will give consideration to all suggestions made. Each squad leader should make a brief report of the meeting of his squad at 4:30 o'clock on the preceding afternoon. This committee should have a chairman and a secretary and a written record of the meetings should be kept.

Content of Courses.—The activity courses will be the same as for the teachers but with extra practice sessions for the purpose of acquiring skills. Work will also be given in leadership techniques. About three-fourths of the time of every class period should be devoted to the practice of activities, and about one-fourth of the time should be used for discussion of the organization, conduct, and safety factors of the activities.

Text.—The textbook for all courses should be the bulletin, *Physical Fitness Through Physical Education for the Victory Corps.* It is recommended that supplementary materials be used.

Dress.—Every student and faculty member should be expected to wear clean and suitable clothes to classes. The recommended costumes for the activities classes are: (1) For men and boys—soft-soled shoes, trousers or shorts, and shirt of washable material; and (2) for women and girls—soft-soled shoes and play suit or slack suit. In most cases the students and teachers should be requested to bring these costumes with them from their homes.

Schedule.—The schedule of classes should be definitely planned and strictly followed. The following form is suggestive of how the schedule and assignments might be arranged.

Classes or meetings	Place	Teacher	Squad or group	Time and dates

PERSONNEL OF INSTRUCTION:

Institute Director.—The institute director should: (1) have general charge and supervision of the entire program; (2) arrange the program; (3) provide facilities; (4) obtain the faculty; (5) promote attendance; (6) arrange the housing and feeding; and (7) direct

the general organization and operation of the institute.[2]

Director of Instruction.—The responsibilities of the director of instruction should include the following: (1) scheduling faculty meetings and presiding at these meetings; (2) assigning responsibilities to faculty members and students; (3) making arrangements for and presiding at general assembly programs; (4) assigning places for classes, assembly, and other meetings; (5) acting as adviser for the Students Advisory Committee; (6) arranging for certificates of awards to students who complete the course satisfactorily; (7) setting up a system of keeping individual records of the students; (8) arranging opening exercises; (9) supervising teachers; and (10) obtaining necessary supplies for office, class, and extra-class activities.

Faculty.—The responsibilities of each faculty member should include the following: (1) organizing and teaching of classes assigned to him; (2) serving as adviser to the squad to which he is assigned; (3) assisting with extra-class activities and special events as requested by the director; (4) observing students with special attention to the individual members of his squad; (5) attending faculty meetings; (6) keeping necessary records and making required reports; (7) providing and wearing appropriate clothes for classes and for all other special activities; and (8) obtaining necessary equipment and supplies for classes through the customary channels.

In-school Leader Training.—In order to have squad leaders, and performance or demonstration leaders, some special instruction to selected personnel will be necessary in each school. Some of this can be given during regular class time as squad leader practice by the skilled instructor but should probably not be attempted by most untrained teachers.

The most common practice is the organization of a Leaders Corps or Club which meets with the teacher one or more extra periods a week as a special privilege for instruction. There may also be another group of novice leaders preparing for admission to the regular leaders' group as junior leaders. Care should be taken in such a program not to interfere with intramural and similar activities and to allow a wide spread in leadership opportunity. »«

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[2] It may be necessary to combine the positions of Institute Director and Director of Instruction.

Parallel Rhythms

(Continued from Page 423)

vocal music found among these people (the Andean "Yarabi," to quote but one) and we have a picture of the magnificent possibilities in the folk art of our neighbors.

COMING to our own country, we find yet another avenue through which the interdependence of music and dance can be manifested. This expression of rhythmic activity, though closely allied to the folk dance, is a department in itself. We are speaking of the revival of square dancing. Although it has gained increasing popularity among adults, it still belongs to youth. This type of dancing is noted for its vigor, and because of that attracts masculine participation which sometimes shies from the too aesthetic quality in other categories. One of the outstanding exponents and successful teachers of this type of dancing, Lloyd Shaw, has said: "I'm convinced that folk dancing—the adult peasant sport of Europe—was killed for America by giving the dances to children and girls in schools." If this statement is to be considered seriously, then the men in the boys' physical education department should feel the responsibility of stimulating interest in these dances in their classes in conjunction with the girls' physical education projects. In this dance of expression of our western pioneers, the orchestra is indispensable. Square dancing insists upon the application of violins and the stentorian vocal powers of a caller.

There is one more phase of activities which combines the efforts of the music and dance departments. The practice of including social dancing in the curriculum of the Los Angeles Schools has been instituted coeducationally. The administrators naturally turn to the physical education and music departments to assume the responsibility. It rests upon the music de-

partment to furnish orchestral accompaniment which must not fall into the frenetic quality of our dance-hall "hep-cats" but which must still be socially acceptable to the youth of our modern era.

In conclusion these observations constitute the major field of effort between the two indispensable departments of our secondary schools. By their coordination they contribute to the educational, social, and recreational development of society. In the latest chaotic upheaval in the affairs of men the standard of his civilized efforts should not be allowed to retrogress, but should march forward as triumphantly as the flags of our gallant armies. »«

The Industrial Front

(Continued from Page 415)

ficiently. Through recreational sports, games and hobbies, a broad range of judgments and the necessary coordination to carry out the judgments are trained. Accordingly, these judgments are latently available for similar reactions and coordinations necessary for better production.

Safety demands that a man work with his head as well as his hands. The judgments and general body coordinations learned through participation in recreation activities here have a carry-over value in that the individual learns to control his body in motion as it is related to static and moving objects. If one eliminates the factor of careless thinking, it is generally accepted that those with better general body coordinations are less liable to become involved in accidents in homes, streets, highways, playfields, and factories.

It has never been true that the economic motive is the strongest motive that governs industrial workers. Inspired industrial production is not purchased with wages. Men don't risk their lives to rescue trapped fellow mine-workers for money. Soldiers don't charge machine-gun nests for a stipend. They do it because of loyalty, patriotism, and their desire for happiness.

MORALE has been defined as "fitness within." It further means the ability to respond as a complete individual in trying situations. As well, it means happiness and joy in one's occupation. Perhaps more important, it also means the feelings on the part of the individual belonging to a group. This relationship between individual and company, and individual and team, is similar in genesis. The fact that the school team builds school morale carries over into the industrial organization. The department team, whether it be bowling, basketball, or tennis, will, as well, engender the response of support to that team. When these factors are enlarged to encompass the company or business, it may be seen that the general morale of a concern may be raised through industrial recreation activities. Inter-company competitions cannot be overlooked as a stimulant for participant and spectator alike to call forth support of a team or organization.

Proper physical condition is dependent upon mental condition. Peak efficiency, either on the fighting front or the home front, cannot be expected unless there is a satisfactory state of mind. A poll of war production personnel made by John B. Kelly, director of the United States Division of Physical Fitness, showed that efficiency suffered where normal recreation and relaxation periods had not been provided or where they had been eliminated.

"Scrap can be salvaged; raw materials can be stored; idle factories can be converted; but a man-hour lost is gone forever." Such a statement was recently made by Austin M. Fisher in his interesting article on absenteeism in the *Saturday Evening Post*. Objective studies of absenteeism reported by the WPB and the OWI revealed that specifically the causes of A. W. O. L. from production were: (1) illness, (2) bad working and living conditions, (3) poor transportation, (4) lack of "convenience" facilities, and (5) inaccessability of recreation facilities.

Recreation is, accordingly, a real, a potent, and a vital factor in the reduction of absenteeism. The results of a recent survey made by the Industrial Recreation Association indicated that in 72 per cent of those industries which replied, absenteeism had been lowered by their recreation program. By planning recreational pilgrimages during the hunting and fishing season, sporadic absenteeism may also be eliminated. Recreation during noon hours and at rest periods provides the "pause that refreshes."

The lack of facilities, leadership, and equipment for use by the industrial worker during his leisure hours forces him into taverns and other non-recuperative recreational pursuits. Where recreation programs are organized under an employee's recreation association, having financial independence and with a broad program for all age-range interests, it can be definitely stated that the absence rates will be reduced.

In establishing suitable recreational and health programs in industry, medical and industrial leaders will do well to remember that those programs serve best in which participation by workers is voluntary and in which cooperation rather than control represents the prevailing attitude. American workers resent dictation. They are suspicious of efforts in their behalf which are motivated by any other concern than the good of the worker himself.

The preferred method of installing recreational facilities in a plant is to have the employees ask the employer for them. This avoids charges of paternalism and the possible resultant frowns of the NLRB. But if the workers were to have the suggestion made to them, there is little doubt that they would hasten to make a formal request.

A competently arranged and managed recreational program accomplishes many things: it promotes individual and collective sportsmanship; it acts as a flux to help weld the various peoples of both sexes and of all age groups into one cohesive mass; it acts as a

catalyst to hasten the joining of heterogeneous worker groups with supervision and management; it increases the mental and physical ability of the participants; it produces better relations between industry and public officials in three ways—by relieving the already overtaxed public recreation setup of a portion of its burden, by cutting down on adult delinquency, and in so doing, reducing juvenile delinquency.

The success of any recreation program depends to a great extent upon the percentage of individuals participating. And participation will result only if the program follows employees' interests. Large sums of money have been expended by several companies on recreation centers for employees. Extensive programs were planned, published, and distributed among the workers. The majority of these programs failed. Why? Because the programs reflected the recreational interests of the leaders and were not based upon the interests of the groups to be served. The more progressive programs are those which have been evolved from the workers' interests and have been cooperatively established.

A recreational director will make use of the natural initiative of the employee group and direct its haphazard efforts along lines leading to increased participation and toward mental, physical, and spiritual growth. An employee organization with the recreation director as ex-officio head to determine the desires of the industry and to create a program that will satisfy those desires, is one of the ideal arrangements.

Individual tastes are of unlimited variety. A review of existing recreation programs for industrial workers reveals that the extent and scope of the individual company programs vary extensively. This is in line with the theory that programs should be based on employee interests.

Many recreational activities do not require extensive planning and organization. Radio programs, reading, checkers, chess, etc., are enjoyed by thousands of individuals and are informally organized. Competitive sports and similar activities become more popular with the workers when leagues are formed and regular schedules played. Therefore it is essential that organizational techniques and planning should be carried out by leaders.

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THE recreational director can serve as a leader in suggesting activities that perhaps never would have occurred to employees. People of the United States need to learn the recreational activities of the arts, for example. The value of good music needs to be emphasized. Dramatic performances in which amateurs participate are gaining more and more adherence. The health value of such recreations can hardly be overestimated. In addition to developing new points of view, the importance of these activities has led to the development of a new profession—the recreation director. The importance of this new profession has been emphasized by the creation of a Chair of Industrial Recreation at Purdue University, probably the first in what will develop into a nationwide awareness in schools and universities of the necessity for training men and women for the specific job of supervising and leading recreational activities in industry.

The initial step in inaugurating a program would be the selecting of the personnel of the organization committee, made up of representatives from both management and employee groups. A petition should be circulated among the workers and the management groups to ascertain the desire for a recreation association; this is a precaution against the efforts of a small group to sell management on such a program when the majority may not desire it. From that step, if interest is registered by the petition, the organization should proceed with election of officers and board members. The most immediate steps that would follow would be the determining of interests of employees by questionnaire, plans for use of community and public facilities, planning a financial structure, acquiring necessary equipment, use of volunteer leaders, etc.

The impetus given industrial recreation by the war will long outlast the period when our chief goal is victory. Industrial recreation is assuming its rightful place in the industrial picture, and industry in the peace that follows will find that the leisure time of its employees is even more its concern than it is today. »«

Fitness

(Continued from Page 428)

such as fear of overdoing, parental warnings, and boredom. Its appropriate role is that of a safety factor to prevent overstrain. Too often, however, it stops exercise short of "overloading" the physiologic mechanism sufficiently to stimulate growth. Thus some people have never driven themselves into "second wind." Competition against others, against a scoring table, or against a previous record; other factors, such as music, an audience, an instructor, or a compelling desire to become fit, are effective in extending this limit. Successful athletes reduce the distance between their psychologic and physiologic limits to a minimum. This is probably one of the most important concomitants of athletic training.

Differential Use of Body Parts

Although any exercise of endurance "overloads" the heart and consequently develops it, there are few sports that use all body muscles equally. Consequently the muscular development of a man reflects his sport, and his work. On the other hand, a man's style within a sport may be influenced by the muscles that he already has well developed. This is another way of saying that in such self-directed activities as athletics a person is likely to strengthen further his already strong muscles and to ignore some weaker ones. Against this setting, calisthenics, rhythmic gymnastics, or other forms of directed activities as used in training programs find their justification. Under intelligent direction, groups of muscles neglected in the limited activities of daily work or in sport programs may be singled out for intensive compensatory development.

Sport Was Made for Man; Not Man for Sport

In all education the person is considered most important. Activities are selected and adapted to serve his needs. In the use of exercise to develop fitness the following statements are worthy of consideration.

1. There is no valid substitute for a thorough physical examination to determine ability to undergo hard physical training.

2. Precluding accidents, a normal, healthy child cannot do himself permanent organic injury by physical exertion.

3. Although there is good evidence that exercise has never permanently damaged a physiologically sound heart, persons past forty must be watched with especial care since there may be considerable cardiac damage that cannot be detected even with the best available methods and instruments.

4. Ability to recuperate after exercise is a good guide at any age. If breathing and heart rate are still greatly accelerated ten minutes after exercise, and if marked weakness or fatigue persist after a two-hour rest period, or if there is disturbed sleep or a sense of fatigue into the next day, the exercise has been too severe.

This refers to discomforts referable to heart and lungs. Ordinary muscle soreness is no danger sign and even the former is often experienced by entirely sound men in hard training without untoward consequences.

5. In muscular strength and heart capacity women are weaker than men. These differences grow more pronounced at adolescence. Because of structural weakness in the pelvic floor of women they should avoid jumping from heights, heavy lifting, and other activities that greatly increase intra-abdominal pressure. They will profit from most other activities. The strenuousness of any activity is in the last analysis a function of player effort. Rules and court sizes are secondary factors. Physiology cannot referee the debates on boys' vs. girls' rules. Such conflicts need arbitration in the higher courts of feminine appeal.

6. Strong emotion, even without exercise, interferes with digestion. A full stomach may embarras

breathing and vigorous movements; but there is no evidence from laboratory tests or from the experience of observing teachers to indicate that physical exertion including swimming need otherwise be curtailed after eating.

7. Strenuous competition without proper training or against far superior strength is undesirable.

8. Unless adequate protection can be provided, activities in which the head is the target, notably boxing, are undesirable because of the danger of permanent damage to the brain. Wrestling and judo have proven themselves superior to boxing as means of self-defense.

9. The training in preparation for an athletic event contributes more to physical fitness than does the actual event.

As Leaders of Recreation

We see men and women tense under the strain of noise and speed-ups. We see them bored and cramped by tedious routine. We see them fretful, with nerves worn raw by petty strife and wrongs—real or imagined.

We have seen such persons come out of a hard game or a cool swim completely made over with new light in their eyes, washed of their tensions, and with a feeling of freshness even though physically tired. This we have called recreation. We have written books and talked conferences full of it. We spend millions to get it and sometimes after long planning and extended travel we miss it.

Although each of us would stoutly defend the existence of the phenomenon we readily admit that we know too little about it. A purely subjective experience; we cannot describe it; we have no gauge with which to record its presence or absence; we cannot estimate how much we have of it. We cannot with certainty say that any activity is sure-fire recreation. The volleyball game may provide recreation for nine and frustration to the tenth whose fingers and pride are hurt by several near misses at the outset.

Recreation is not an activity. It is a state of mind. To be sure the improved circulation of a seventh-inning stretch or a joyful activity may wash the cobwebs of approaching anemia from a brain held too long at the upper end of a rigid spine; but this physiologic refreshment is not the essential aspect of recreation. Recreation is also found by some in quiet meditation, in poetry, or at the movies. "When wearied of play," said Thomas Jefferson, "I always turn to books."

Stripped of all extras, recreation remains associated with an all-absorbing activity, one in which the person can completely lose himself and for the time being forget the troubles and hundrum of ordinary life. The activity provides temporary escape and its effectiveness is proportional to the completeness of the escape. Be-

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SPECIAL—We are happy to welcome Frances L. Chalif into the active force of our faculty.

cause active sports demand complete attention, they are especially useful; but a thousand and one activities ranging from a game of chess to a giant swing may serve as well. Recourse to alcohol and other narcotics appears to be the only way open to many and suggests some inadequacy of experience with recreational activities. The person whose work provides a sufficient variety of activities each completely absorbing, often feels less need for special recreation.

The ideal activity is that two-in-one tablet which provides simultaneously physical fitness and recreation.

As Teachers and Friends of Human Beings

We find that health, strength, and the ability to recreate are not enough. Chicago housewives who bitterly complained of having to slice their own bread did not lack strength. Freedom from disease does not help a young woman to think calmly about her soldier in Tunisia. Physical agility is of little help to one who sees war as empty bloodshed. No lack of physical endurance caused 37,000 teachers to enter industry last year. Even from successful escapes into recreation the mother must ultimately return to live with her thoughts of a son buried at sea. Total fitness must insure also serenity in storm, and sanity in desperation—in short, spiritual fitness.

Tensions are accompanied by muscle tenseness. Muscle tenseness in turn perpetuates mental tension no matter what its initiating cause. Training in muscle relaxation is used successfully in conditions ranging from simple fatigue to deep-seated functional disorders.

English children evacuated to strange homes in the safe countryside often fared worse mentally than those who lived through bombings by the side of trusted parents and teachers.

Also for our hidden fears, for our inner feelings of guilt and shame we need the trusted ear of a true friend who even in listening will help to dissolve the unnecessary, often artificial, association of fears that we have accumulated in memory. At times the aid of specially trained advisors may be needed; more often a true friend is enough.

To keep itself intact the mind of man must have a structure whose strength is derived from its consistency with the world as it is perceived. How many persons have developed a philosophy that in some measure explains to them the world in which they must live. The simple "religious soul," now nearing extinction, may not have known all the answers. Too often he may have said, "Although I do not understand, I'm sure it's in God's plan; and I have faith that God will make all come out right." He may have been wrong, but his quiet faith gave him strength to carry on serenely. Contrarily we moderns dismissed God, ourselves assumed responsibility for operating the world, and promptly lost confidence in the new management. Bewildered we now face the immutable laws of nature—in the heavens, in the earth, in health and disease, and in the mental and social phenomena of human activities. These are the mills of God that grind slowly but very fine. Being as vast as the universe and as intricate as the mind of the smartest man they are far beyond the comprehension of America's 14-year old I. Q. Too smart to believe in God yet too dumb to comprehend God, we are in a mess. Trained in schools that boasted knowledge for its own sake and scorned as "unscientific" any excursion into metaphysics this generation knows too much and understands too little.

There must be provision for young and old to think and discuss and to commune with the infinite. They need friendly leadership, but not from those who would have them ignore knowledge and retreat to the easy, Santa Claus, God-idea that helped to get us into this trouble. They need guidance to understand themselves, their fellow men, and the complexities of an evolving social order in which man must assume responsibility for his acts and work out his own salvation with reverence and understanding for the immutable laws. Are we such leaders?

There remains another requirement for total fitness. Every man must feel himself with others engrossed in a venture greater than himself and of importance to that venture. For the integrity of his spirit it matters little what venture, provided he willingly gives more than he gets in return; but for the good of the world it matters no end that his venture be constructive and progressive.

As a nation we are here least fit. Raised to look out for No. 1 and to get more than we give, it is difficult to reverse the trend. With candidates offering prohibition repeal in return for votes, with laws determined by pressure groups, with lend-lease to nations that will spare us the harder tasks of war, and with defense bonds as a way of getting four dollars for three, where is there any training in unselfish giving? With every worker, politician, union, and capitalist holding out for a share of war profits and war powers where is there a cause greater than self?

The cause is waiting in every effort for the common good. Our pupils must be helped to collect scrap not for the pay in it, not only for the glory of bringing in the greatest pile, but to help build a more just world. For ourselves the cause is waiting in every child who looks to his teacher for help. For a nation it is waiting not in national prosperity, not in national strength, but in the challenge to serve the entire human race.

A master builder asked of three workmen the same question, "What are you doing?" Although they were engaged in identical tasks, one answered, "I'm making a living at cutting this stone!" Another answered proudly, "I'm the best stone cutter on this job." The third, inspired, said, "I'm helping to build that cathedral."

Airplanes raid, machine guns mow,
Still babes are born, and children grow.
Exciting news fills page and air,
Yet children grow in need of care.
Your friends enlist, go off to war,
Your pupils need you even more.
Distracted, brain-racked, doubting your role,
'Till you help on its way a pupil's soul. *A. H S.*

The Reading Section

New Books - - -

The Meaning of Nutrition. Harriet Stone. (Boston: Little, Brown and Company, 34 Beacon Street, 1943) 64 pages, 44c.

This book, one of the Home Economics Series, was written for the high school boy and girl. It is a straightforward, non-technical discussion of how food is utilized by the body, and it gives instruction in food values and the wise choice of food. The book is well illustrated.

A Family of Thirty Million. Louis I. Dublin. (New York: Metropolitan Life Insurance Company, One Park Avenue, 1943) 477 pages.

This is the history of the Metropolitan Life Insurance Company. It records the beginning of the company when it was chartered on March 24, 1868, up to the present year which marks the 75th anniversary.

Toward Community Understanding. Gordon W. Blackwell. (Washington, D. C.: American Council on Education, 744 Jackson Place, 1943) 96 pages, 75c.

The concept of community understanding and its implications for teacher education have been thoughtfully explored in this book. At least one example of each type of program or activity studied has been analyzed and described and suggestions have been offered which are designed to be helpful to educators interested in experimenting along similar lines.

An Evaluation of Dental Health Literature. Vern D. Irwin and Netta W. Wilson. (St. Paul: Bruce Publishing Co., 2642 University Avenue, 1942) 54 pages, 50c.

This book is the result of a careful and time-consuming study of dental health literature. Among other material, the book contains a discussion of nearly 2,500 statements from current dental health literature, many of which are shown to be fallacious, misleading, or overtechnical. There is an analysis of why dental health literature often fails to interest and influence the public and numerous suggestions for making future dental health literature more effective in content, style, and format.

Personal Health, First Aid, and Home Nursing. Second printing. Bernice Strawn and Lois B. Hastings. (Minneapolis: Burgess Publishing Co., 426 South Sixth Street, 1942) 50 pages.

This is a study outline prepared for use as a guide for readings, class discussion, and laboratory work in a first-year college course in personal health. Personal hygiene is studied so that the student will gain a knowledge of the fundamental facts of positive health. Home hygiene is discussed though the student is impressed with the fact that this includes only some of the simpler duties and not those of a registered nurse. Fundamentals in first aid are taken up because of the increasing number of accidents in the home and on the highway.

Fundamental Exercises for Physical Fitness. Claire Colestock and Charles Lowman. (New York: A. S. Barnes & Co., 67 West 44th Street, N. Y., 1943) 315 pages.

This book was written in response to requests for fundamental positions and sets of exercises needed by coaches, dancing teachers, and rural communities without facilities, equipment or physical directors. The authors feel that these exercises meet that need. They are designed so that all boys and girls may participate, and thus be given a part, in the general move toward victory and yet not be permitted to injure themselves or jeopardize their chances of being fit when they become eligible for the military forces or the home front army.

Physical Training, W.A.C. Field Manual. (Washington, D. C.: U. S. Government Printing Office, 1943) 129 pages, 50c.

The Women's Army Corps field manual contains exercises and activities planned by women for women. It recognizes their capacities and is based upon a knowledge of the tasks women may be called upon to perform. The exercises are simple and progressive and by slow, methodical stages they build up physical condition.

Physical Fitness for Girls. Rosalind Cassidy and Hilda Clute Kozman. (New York: A. S. Barnes and Co., 67 West 44th Street, 1943) 158 pages, $2.00.

This book is an antidote for the wrong type of physical education for young girls and a usable plan for something better. It is a new approach to the whole conception of physical education and its place in a sensible scheme of general education. As a textbook for students preparing to teach physical education in secondary schools, it offers not only a fitness program but a social and cultural background for it.

Fitness First. Hilda Clute Kozman and Rosalind Cassidy. (New York: A. S. Barnes, 67 West 44th Street, 1943) 32 pages, 60c.

This is a physical fitness workbook for high school girls. It is designed to help teachers and interest every girl in the class. Used with *Physical Fitness for Girls*, it provides the teacher with a methodical outline for individual guidance. The workbook presents its topics in a challenging manner and with clever illustrations.

Health and Physical Fitness. I. H. Goldberger and Grace T. Hallock. (Boston: Ginn and Company, 1943) 585 pagess, $1.92.

This book has been written to help American youth to be strong and healthy in body, sound in mind, firm and zealous in morale, and well balanced in personality. It presents the authentic facts basic to healthful and successful living, gives accurate information necessary for the sensible care of a mature physique, and aids in adapting health habits and customs to home, school, and community life. Further, it promotes wholesomeness and understanding of all phases of adolescent growth and inculcates sound attitudes and intelligent self-direction toward desirable health behavior.

Recent Articles - - -

Physical Fitness. Twelve-page portfolio. *Nation's Schools.* August, 1943.

Victory Corps. (From *One Man's Meat*) *Harper's.* April, 1943.

The Victory Corps Faces the Future. Frederick D. Becker. *Journal of Education.* May, 1943.

Flu Is Through. John Moreland, *Collier's,* September 4, 1943.

Present Status of Federal Aid. Willard E. Givens. *NEA Journal.* September, 1943.

Just Think, Another September. G. O. Blough. *NEA Journal.* September, 1943.

School Lunch Programs Must Be Educationally Sound. Federal Security Agency, U. S. Office of Education. *Education for Victory.* August 16, 1943.

Absenteeism in War Industry. Elmo C. Wilson and Daniel Katz. *Survey Graphic.* September, 1943.

Come, Let Us Reason Together. Ruth Mumford. *Progressive Physical Educator.* June, 1943.

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The American Sokols. Anna K. Seaman. *Progressive Physical Educator.* June, 1943.

Protection of School Children During Air Raids. Office of Civilian Defense. *Progressive Physical Educator.* June, 1943.

Psychiatry's Ounce of Prevention. M. A. Tarumianz and H. Edmund Bullis. *Education Digest.* May, 1943.

Mental Hygiene for War Service. S. R. Laycock. *Education Digest.* May, 1943.

Post-War Health Coverage in Rural Areas. Randolph G. Bishop. *Dental Health.* May, 1943.

A Practical Rural Experiment. Irene Cooper O"Brien. *Dental Health.* May, 1943.

On the Trail of Halitosis. Nina Mae Munson. *Health.* August, 1943.

You Can't Give Credit Away. Editorial. *Youth Leaders' Digest.* Summer, 1943.

Physical Efficiency as a Secondary Sex Characteristic. E. Jokl and T. W. de Jongh. *Manpower* (Government Printer, Union of South Africa, Pretoria). March, 1943.

Effect of Mid-day Meal Upon Physical Efficiency of School Children. Daphne Clark, T. W. de Jongh, and E. Jokl. *Manpower* (Government Printer, Union of South Africa, Pretoria). March, 1943.

The Soviet Ballet, 1917-1943. *Dance Index.* June-July, 1943.

The Dance and Fitness. Shailer U. Lawton. *Dance Magazine.* August, 1943.

Physical Fitness. Ninon De L'Enclos. *Dance Magazine.* August, 1943.

Juvenile Delinquency—A National Problem. J. Edgar Hoover. *National Parent-Teacher.* September, 1943.

Recreation. Morris Fishbein. Editorial. *Hygeia,* September, 1943.

The Teacher's Role in Mental Hygiene. Herman Jahr. *Hygeia.* September, 1943.

Penicillin, The Wonder Drug. E. K. Gubin. *Hygeia.* September, 1943.

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Recreation in War Time. Office of Civilian Defense with the cooperation of the Office of Health and Welfare Services, OCD Publication 3624, May, 1943. Free.

Anxiety and Its Control. Reactions of People Under Stress, Instruction Schedule No. 1, compiled by the Military Mobilization Committee of the American Psychiatric Association. State Hospitals Press, Utica, N. Y., 1942. Free.

Morale and Its Control. Reactions of People Under Stress, Instruction Schedule No. II, Military Mobilization Committee of the American Psychiatric Association. State Hospital Press, Utica, N. Y., 1942. Free.

Fatigue and Its Control. Reactions of People Under Stress, Instruction Schedule No. III, Military Mobilization Committee of the American Psychiatric Association. State Hospitals Press, Utica, N. Y., 1942. Free.

Training High School Students for Wartime Service to Children. School Children and the War Series, Leaflet No. 5, Federal Security Agency, U. S. Office of Education. Superintendent of Documents, Washington, D. C., 1943. 10c.

Recreation and Other Activities in the All-Day School Program. School Children and the War Series, Leaflet No. 7, Federal Security Agency, U. S. Office of Education. Superintendent of Documents, Washington, D. C., 1943. 10c.

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